(Article XIX.)

A CENTURY OF AMERICAN MEDICINE.

1776–1876.

IV.

LITERATURE AND INSTITUTIONS.

By John S. Billings, M.D., Assistant Surgeon U. S. Army.

"Wherefore, by their fruits ye shall know them."

Besides his duties to his patients, the physician is under certain obligations to contribute, by way of interest, his quota to the common stock of medical knowledge from which he has drawn so freely. The skilful diagnosis, judicious medication, or bold and successful operation, if not properly recorded, benefit the individual only, not being available for those comparisons and higher generalizations which alone can make medicine a science. By the manner in which this duty, of preserving and transmitting the results of its labour and experience, has been performed, the medical profession of a country, as well as the individual physician, must to a great degree be judged, and the question now presented is, to what extent and in what manner have the physicians in the United States fulfilled this part of their professional obligations during the century just passed.

In the retrospective reviews, historical sketches, and centennial addresses which have, during the past year, been devoted to American medicine, our most important contributions to the healing art have been duly pointed out, and for the most part sufficiently eulogized. That the United States has a medical literature, has been cumulatively demonstrated, even to the extent of raising a suspicion of the existence of a doubt upon this point; and that this literature contains many valuable original contributions to the art, if not to the science, of medicine may be considered as unanimously affirmed and admitted.

If the defects of which all are more or less aware, have been but slightly referred to, it is because the purpose of the writers has been rather eulogistic than critical. In this final article of the present series, the object is not to select for praise the best of the work, nor the reverse, but to endeavour to give an idea of the quantity and value of the whole of it. So far as individual writers are concerned, an attempt will be made to supplement the information given in previous papers, but these have been so complete as regards that which is worthy of notice, that little need be said of single books and articles.

We will first endeavour to give some account of the quantity of medical literature produced in the United States during the last hundred years; making use for the purpose of some statistics obtained from a nearly complete list of the medical books published in this country from 1776 to the present time, and from which it may be considered certain that no important work has been omitted.

In these statistics we do not include works intended for the non-medical public, those relating to "ics" or "pathies," nor the great mass of what are called pamphlets in the technical sense of the word, that is, books of less than one hundred pages. The great majority of these pamphlets are either reprints from periodicals, addresses inaugural or valedictory, a few of which contain historical data of interest, or controversial and personal disquisitions which are best forgotten. While it is true that there is no necessary connection between the size of a work and its practical or scientific value, it will be found that with a very few exceptions, which have been pointed out in the preceding articles of this series, nothing of interest or importance is omitted by this division. The books to be counted may be classified as follows :—

I. Systematic treatises and monographs by physicians residing in this country, including reports of hospitals, corporations, and government departments.
II. Reprints and translations of foreign medical books.
III. Medical journals.
IV. Transactions of medical societies.

The first, third and fourth classes include what is ordinarily meant by the phrase "American Medical Literature." From them are excluded books written by American authors, but printed abroad, as, for instance, those of Dr. Wm. Charles Wells ; while on the other hand, they include books written by physicians born and educated abroad, but who may be said to have become citizens of this country, such as Tytler, Pascalis, Bushe, Dunglison, Jacobi, and Knapp.

The statistics of the four classes above given, include not only the medical literature of the United States for the century, but nearly all which the country has produced since the first settlement. At the commencement of the Revolutionary War, we had one medical book by an American author, three reprints, and about twenty pamphlets. The book referred to is the "Plain, Precise, Practical Remarks on the Treatment of Wounds and Fractures," by Dr. John Jones, New York, 1775. It is simply a compilation from Ranby, Pott, and others, and contains but one original observation, viz., a case of trephining followed by hernia cerebri.

The libraries of our physicians were composed, according to Bartlett,[1] of the works of Boerhaave, with the Commentaries of Van Swieten, the Physiology of Haller, the Anatomy of Cowper, Keil, Douglass, Cheselden, Monroe, and Winslow.; the Surgery of Heister, Sharp, Le Dran, and Pott; the Midwifery of Smellie ; the Materia Medica of Lewis ; and the works of Sydenham, Whytt, Mead, Brookes, and Huxham. The works of Cullen were just beginning to be known. The only public medical library was that of the Pennsylvania Hospital, which contained, perhaps, two hundred and fifty volumes. There were probably not two hundred graduates of medicine in the country, and not over three hundred and fifty practitioners of medicine who had received a liberal education. Two medical schools had just begun, but had accomplished little previous to the war which closed them, there were no medical journals, and but one State Medical Society, that of New Jersey, had been organized. From this unpromising condition of things, have been developed the literary results, of which we now present a summary.

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[1] A Dissertation on the Progress of Medical Science in the Commonwealth of Massachusetts, Boston, 8vo., 1810.

Table showing number of Medical Books printed in the United States from January 1, 1776, to January 1, 1876.

		1775 to 1799	1800 to 1809	1810 to 1819	1820 to 1829	1830 to 1839	1840 to 1849	1850 to 1859	1860 to 1869	1870 to 1875	Total.
	CLASS I.										
American Medical Books	No. 1st edition	39	24	51	48	83	96	101	157	130	729
	No. later editions	9	4	14	17	34	49	80	85	44	336
	No. Vols. Total	51	31	77	86	136	162	197	256	160	1176
	CLASS II.										
Reprints and Translations	No. 1st edition	28	39	64	72	145	135	99	104	81	767
	No. later editions	11	23	28	33	36	67	76	64	50	388
	No. Vols. Total	49	76	111	135	192	214	184	160	137	1274
	CLASS III.										
Medical Journals	No. Journs. com'ced	1	5	6	17	18	26	52	38	32	195
	" " discont'd	......	3	5	10	18	14	31	36	20	137
	"A."										
Original	No. Vols. com'nced	2	21	27	85	104	173	376	292	296	1376
	No. Vols. compl'ted	2	20	27	79	98	166	366	271	283	1312
	"B."										
Reprints	No. Journals	......	......	1	4	......	5	1	3	3	17
	No. Volumes	......	......	9	29	20	46	71	51	32	258
	CLASS IV.										
Transactions Med. Societies	No. Volumes	7	3	2	5	17	27	76	88	111	336

It will be seen from this table, that the medical literature of the United States really commences with the present century, and this is still more apparent, if the character of the works issued prior to 1800, be considered.

The first literary contributions of our physicians, after the close of the war, are contained in the memoirs of the American Academy of Arts and Sciences, Boston, 1785, and in the Transactions of the American Philosophical Society at Philadelphia, 1786. The first original separate work was the "Cases and Observations by the Medical Society of New Haven County, in the State of Connecticut," New Haven, 86 pp., 8vo., 1788. This is a collection of twenty-six articles, including several cases and autopsies, of interest, and a paper on the production of dysentery among troops by overcrowding and foul air, in which the connection of cause and effect is clearly demonstrated.

The majority of the succeeding publications, to the end of the century, related to the yellow fever, which was then epidemic along the whole Atlantic coast. The most prominent author of this period is Benjamin Rush, noteworthy also as an orator and politician. His writings excel in manner rather than matter, and the undoubted influence which he exerted over the earliest stages of American medicine, was probably due to his lectures rather than his published works. The best of his essays, and indeed the only one to-day worth consulting, is that on diseases of the mind, which contains some original observations of interest. One of his eulogists, Dr. Ramsay,[1] says: "On the correctness of this opinion

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[1] Eulogium upon Benjamin Rush, by David Ramsay, Philadelphia, 1813, 8vo., pp. 79.

[viz., his fondness for the use of the lancet] his fame as an improver of medicine in a great degree must eventually rest." And to the correctness of this judgment we entirely assent.

The work of James Tytler[1] is a good compilation, and contains, among other data not to be found elsewhere, an interesting letter by Dr. John Warren, of Boston. Tytler was born in Scotland in 1747, came to this country about 1796, and was drowned in 1804; he possessed extensive and varied learning, and wrote much, but for the most part on non-medical subjects.

The works of Noah Webster,[2] though mainly historical, are still of interest, and worth preservation.

Another writer of this period is Dr. William Curry, a native of Pennsylvania, 1755–1829. At first educated for the church, he acquired an excellent knowledge of Latin and Greek, and studied medicine under Dr. Kearsley, of Philadelphia. During the Revolutionary War he served as surgeon in the American army, being attached to the military hospital on Long Island, in 1776. After the war, he at first settled at Chester, but removed to Philadelphia about 1791. He was one of the original fellows of the College of Physicians of Philadelphia, and for many years a member of the Board of Health. His principal works in addition to his numerous pamphlets and articles on yellow fever, are his "Historical Account of the Climates and Diseases of the United States," 1792; and his "View of the Diseases most Prevalent in the United States," Philadelphia, 1811.

Towards the close of the century, and for a few years thereafter, there were published in Boston, New York, and Philadelphia, a number of medical theses, which, being classed as pamphlets, are not taken into account in our statistics, and are noticed here for the sake of saying a word with regard to this class of medical literature. A medical dissertation prepared, not for the press, but simply as a formality necessary for the obtaining of a diploma, as is the case with nearly all those which have been presented at our medical schools for the last fifty years, fairly merits the denunciation of Professor Gross, "that not one in fifty affords the slightest evidence of competency, proficiency, or ability, in the candidate for graduation."

Such was not the case, however, with regard to the theses above referred to, nor can it be justly said with regard to any series of printed theses of the European schools. It would seem, therefore, that when prepared as they should be, with reference to the probable criticisms, not merely of a single professor, but of the press and the public, there is the strongest inducement to refrain from plagiarism, and to produce the best work of which the candidate is capable; and it is well known to those who have had frequent occasion to consult them, that collections of printed medical theses are valuable, as historical documents, presenting a reflex of the teachings of the school, and as containing accounts of cases and original investigations, or particular doctrines of the student's preceptor, which cannot be found elsewhere. The proportion of copied matter, vague speculations, and other rubbish, does not, upon the whole, appear to be so much greater in this than in some other classes of medical literature, as to warrant their wholesale condemnation; and the remedy for the present unsatisfactory character of the theses of our medical students, appears not to be their abolition, but the requiring that they shall be printed, and considered as an important and real test of the merit of the candidate. They should of course be written in the vernacular. The influence which a teacher has in directing the thoughts of his pupils, is very well shown in the theses of the Philadelphia school, a considerable number of which related to medical botany, under the stimulus given by Dr. Barton to that branch of study.

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[1] A Treatise on the Plague and Yellow Fever, with an Appendix, 8vo., 1799.

[2] A Collection of Papers on the subject of Bilious Fevers, prevalent in the United States for a few years past. 246 pp. 8vo. New York, 1796. A Brief History of Epidemic and Pestilential Diseases; with the principal Phenomena of the Physical World which precede and accompany them, and Observations deduced from the facts stated. 2 vols., 8vo., Hartford, 1799.

During this period, and prior to the establishment of any medical journal, or regular publication of the transactions of any medical society, a number of communications from American physicians were sent to societies in Europe, and appear in their transactions. Perhaps the most notable paper of this kind was "An Experimental Inquiry into the Properties of Opium," by John Leigh of Virginia, which obtained the Harveian prize for 1785, and was printed at Edinburgh in the following year. It is worth consultation, not only for the facts which it records, but for the method of investigation pursued, which was unusual in that day of theories.[1]

From the year 1800 to the present time, the above table shows that there has been a steady increase in the amount of our indigenous medical literature, corresponding in the main to our increase in population and wealth. To obtain some notion of the quality and value of this production, a more detailed analysis is necessary.

The greater part of these books are compends relating to the treatment of diseases and injuries. Those which have been most popular, and are the best known, are the text-books and systematic treatises. These are for the most part compilations, but their importance is by no means to be underestimated, for the practice of the majority of the physicians of this country to-day, is based on the text-books of the teachers in the New York and Philadelphia schools. Also we must remember that "there are compilations and compilations." The preparation of such systematic treatises as those of Flint, Gross, Stillé, and Wood, does not require less labour or thought, or give less scope for display of genius, than the so-called original monographs.

Writers of this class bring into their proper relations the isolated facts and observations scattered through many books, give them the mint stamp of value, and put them into general circulation.

For reasons already stated, and for want of space, but few books can here be noticed, even by title, and in connection with these will be given some very brief biographical data relating to a few authors. Of living writers and their works, as little as possible will be said.

In Anatomy our principal systematic works have been produced by Wistar, Horner, Morton, Richardson, Agnew, Hodges, Leidy, and Smith. None of them are now of interest. Dr. Caspar Wistar, 1761–1818, was of German descent, and a native of Philadelphia. Having obtained a good classical education, he studied medicine under Dr. John Redman, and took the degree of Bachelor of Medicine, in 1782. He continued his studies at Edinburgh, where he graduated M.D. in 1786. Returning to Philadelphia, he became Adjunct Professor of Anatomy in 1791, and continued to lecture until his death. His System of Anatomy was issued in parts, 1811–1814, making two volumes, and was a popular text-book for a long time.

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[1] In this connection also may be mentioned a rare and little known work, being the oration delivered at the University of Virginia in 1782, by J. F. Coste, the Medical Director of the French Forces. Its subject is "Antiqua novum orbem decet medico philosophia;" it is dedicated to Washington, of whom the author was a personal friend, and makes a volume of 103 pages, 8vo.; printed at Leyden, in 1783.

The first work issued by Dr. Horner was a Dissector's Manual, in 1823. This was followed by his treatise on General and Special Anatomy in 1826, his Anatomical Atlas, and treatise on General and Special Histology.

A good original work has yet to be written on this last subject, in this country. In surgical anatomy, Drs. Anderson and Darrach have produced partial treatises, the first on the groin, pelvis, and perineum, New York, 1822; the second on the anatomy of the groin, Philadelphia, 1830.

Drs. N. R. Smith, Goddard, and Neill, have each issued a work on the Surgical Anatomy of the Arteries. Among the few original works in this department, should be mentioned those of Dr. John D. Godman, a native of Annapolis, Md., 1794–1830. Poor and almost friendless, but urged on by an unquenchable thirst for knowledge, he persisted in obtaining an education in spite of the greatest difficulties and discouragements, and at last took the degree of M.D. at the University of Maryland in 1818.

In 1821 he went to Cincinnati to accept a chair in the Medical College of Ohio, but dissensions in the faculty induced his speedy resignation. He then established a medical journal hereafter to be alluded to, but in 1822 went to Philadelphia and began a course of private lectures in anatomy. In 1826 he accepted the chair of Anatomy in Rutgers College in New York, but failing health soon compelled him to cease teaching, although he continued to use his pen until just before his death. Dr. Godman was an anatomist by nature, and though the necessities of bread-winning prevented him from accomplishing any great work, his treatise on the fascia[1] and his contributions to physiological and pathological anatomy[2] are really original and valuable productions.

The papers of Dr. John Dean on the "Microscopic Anatomy of the Lumbar Enlargement of the Spinal Cord," Cambridge, 1861, and on "The Gray Substance of the Medulla Oblongata," published by the Smithsonian Institution in 1864, are the results of careful work, and are noteworthy for the use made of photo-lithography from micro-photographs to obtain the illustrations.

The craniological works of Drs. Morton and J. A. Meigs should be referred to here. Dr. Samuel George Morton, 1799–1851, was a native of Philadelphia, and graduated in medicine at the University of Pennsylvania in 1820, after which he continued his studies for three years at Edinburgh, obtaining his degree in 1823. From 1839 to 1843 he was Professor of Anatomy in the Pennsylvania Medical College. His fame rests upon his "Crania Americana," Philadelphia, 1839, and his "Crania Egyptiaca," ibid., 1844; works which have a world-wide reputation, and whose value is permanent. His labours in this direction have been continued by Dr. J. Aitken Meigs, whose "Catalogue of Crania," Philadelphia, 1857, is well known to all who are interested in this subject.

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[1] Anatomical Investigations, comprising Descriptions of Various Fasciæ of the Human Body, 8vo., Philadelphia, 1824.

[2] Contributions to Physiological and Pathological Anatomy, 8vo., Philadelphia, 1825.

In physiology, our text-books have been the works of Dunglison, Draper, Dalton, and Flint, all too well known to require more than a mere reference. The work of Professor Draper, published in 1853, was the first in this country in which micro-photographs were used to obtain illustrations. To these may be added the works of Reese, Oliver, Goadby, and Paine. Of special treatises and essays, the most important are Beaumont's Experiments on Digestion, Plattsburgh, 1833; Draper "On the Forces which produce the Organization of Plants," New York, 1844; Joseph Jones' "Investigations," published by the Smithsonian in 1856; S. W. Mitchell's "Researches upon the Venom of the Rattlesnake," *idem*, 1860; and Hammond's "Physiological Memoirs," Philadelphia, 1863. In this department Brown-Séquard may be claimed as an American author; some of his researches having been made, and the results first published in this country. Those who are familiar with the literature of thirty years ago will remember with a smile, the treatise of Emma Willard on the circulation of the blood, and the controversies to which it gave rise. The "Essays on the Secretory and the Excito-Secretory System of Nerves," by Dr. H. F. Campbell of Georgia, Philadelphia, 1857, should be remembered in this connection, as also the pamphlets of Dr. Dowler of New Orleans.

In the department of Materia Medica and Therapeutics, we have made a good record. In Medical Botany, the works of B. S. Barton and Jacob Bigelow deserve especial mention as works of permanent value. The "Illustrations of Medical Botany," edited by Dr. Carson, Philadelphia, 1847, containing one hundred plates, in folio, is a rare and costly work, a considerable part of the edition having been destroyed by fire.

The first systematic treatise on Materia Medica and Therapeutics, produced in this country, was that of Dr. Chapman, Philadelphia, 1817. This was followed by the works of Eberle, J. B. Beck, Dunglison, Harrison, G. B. Wood, T. D. Mitchell, Biddle, Stillé, Riley, and H. C. Wood, all of which have been, or are popular text-books in the schools.

The majority of these authors will be referred to under other sections, but of three, a few words may here be said. Dr. John P. Harrison was born in Louisville in 1796; studied under Dr. Chapman, and graduated in medicine in 1819. He was Professor of Materia Medica in the Cincinnati College from 1836 to 1839. In 1841 he accepted the same chair in the Medical College of Ohio, in 1847 was transferred to that of Theory and Practice, and died of cholera in 1849. He was one of the editors of the Western Journal of Medicine, and of the Western Lancet; published a collection of his essays in 1835, and his "Elements of Materia Medica and Therapeutics" in 1846.

The principal work on Materia Medica is the "United States Dispensatory" of Wood and Bache. Dr. Franklin Bache was born in Philadelphia in 1792, and died in 1864. Graduating as Bachelor of Arts in 1810, he studied under Dr. Rush, and obtained his medical degree in 1814. His tastes led him to the special study of chemistry, of which branch he was appointed professor in the Franklin Institute, in 1826. In 1841 he accepted the same chair in the Jefferson School. His principal work was in connection with the United States Pharmacopœia and the Dispensatory, which have made his name familiar to every physician in the United States. The first proposal to form a Pharmacopœia in this country was made to the College of Physicians of Philadelphia, in 1787, with the result of the appointment of a committee, which seems to have continued about ten years, but effected nothing. In 1808 a Pharmacopœia was published by the Massachusetts Medical Society, and in 1816 another was issued by the New York Hospital. Our present national Pharmacopœia originated in a plan submitted to the New York County Medical Society, in 1817, by Dr. Lyman Spalding. A leading part in the formation of the first edition, by the convention which met in Washington in 1820 for that purpose, was taken by the College of Physicians of Philadelphia, through its delegates, and more especially by Dr. Thomas T. Hewson; and in the subsequent revisions, Drs. Hewson, Bache, and Wood were the principal workers. The first revision, adopted in 1830, was entirely the production of these gentlemen, and was substantially a new work. The Dispensatory was projected by Drs. Wood and Bache as an exposition of the Pharmacopœia, and a means of making it more popular.

The exposition has, so far as our physicians are concerned, entirely overshadowed the text, and in a financial point of view, the Dispensatory is the most successful medical book ever published in this country.

Among writers on Materia Medica, distinguished in their day, may be mentioned Dr. William Tully, 1785–1859, who graduated at Yale in 1806, and attended medical lectures at Dartmouth College in 1808–9. He received the honorary degree of M.D. from Yale in 1819. In 1824, he was appointed Professor of Theory and Practice in the Castleton School, and in 1826 removed to Albany, forming a partnership with Dr. Alden March. In 1829, he accepted the chair of Materia Medica and Therapeutics at Yale, and removed to New Haven, but continued his lectures in Castleton until 1838. He ceased teaching in 1841. His principal works were the "Essays on Fevers," published with those of Dr. Miner 1823, a work which gave rise to much controversy, and was, upon the whole, not favourably received; a prize essay upon Sanguinaria, published in the American Medical Recorder in 1828; some papers in the Boston Medical Journal; and finally, his treatise entitled "Materia Medica, or Pharmacology and Therapeutics," Springfield, 1857–58, in two large volumes 8vo. This was published in numbers, was not a popular work, nor calculated for the use of a student, but shows great industry and learning in every page. Complete copies of it are not now easily obtained, although it cannot be said to be rare. His style is discursive, diffuse, and polysyllabic, and a decided effort is necessary to peruse his writings; but his knowledge of facts was minute and exact, and his last work is a mine of information, which is even now worth exploring by the curious.

In Surgery, our indigenous text-books have been produced by Dorsey, Gibson, S. D. Gross, Ashhurst, and Hamilton. On Operative Surgery we have the treatises of Pancoast, Piper, H. H. Smith, Stephen Smith, and Packard. The posthumous work of McClellan is not a systematic treatise, but a series of essays and cases, in which the description of Shock is especially noteworthy as being true to life. Of monographs, the most valuable are those by Professor Gross, on Wounds of the Intestines, 1838; on Diseases of the Bladder, 1851–55; on Foreign Bodies in the Air-passages, 1854 and 1862; and Diseases of the Bones and Joints, 1830; F. H. Hamilton on Fractures and Dislocations, 1860, fifth edition, 1875; Durkee and Bumstead on Venereal; Van Buren and Keyes, and Gouley on the Urinary Organs; Bushe on Diseases of the Rectum; Carnochan on Congenital Dislocations of the Head of the Femur; H. J. Bigelow on the Mechanism of Dislocation and Fracture of the Hip; Ashhurst on Injuries of the Spine; Markoe on Diseases of the Bones; and Garretson's Oral Surgery. Specially valuable collections of cases, are the works of John C. Warren, on Tumors, Boston, 1837; and of J. Mason Warren; the pamphlets of Sayre on Orthopædic Surgery; N. R. Smith on Fractures of the Lower Extremity; and J. C. Nott, "Contributions to Bone and Nerve Surgery." As an example of careful statistical work, the treatise of R. M. Hodges on "The Excision of Joints," Boston, 1861, is to be specially commended.

The treatise of Dr. Gross, on Wounds of the Intestines, above referred to, first appeared in the "Western Journal of Medicine;" it contains the results of numerous experiments and observations, and is of much practical value and interest. It is a rare book, and a copy of it may properly be considered a prize by the collector.

In Military Medicine and Surgery nothing of value was produced by the revolutionary war, the war of 1812, or the war with Mexico. This deficiency has been, to a great extent, made up by the number and value of works resulting from our late war.

The Medical and Surgical History of the War will be, when completed, the largest medical work ever produced in this country. The publications of the Sanitary Commission, including the works of Flint, Gould, and Lidell, contain valuable data. The manuals of military surgery have been written by Gross, Hamilton, Tripler, Blackman, Chisholm, and Warren. Other works which should be remembered in this connection are, Woodward on Camp Diseases, the statistical reports and circulars issued from the Surgeon General's Office, and the medical statistics of the Provost-Marshal General's Office, compiled by Dr. Baxter, making two handsome quarto volumes, which are a most valuable addition to our knowledge of anthropometry and medical topography.

In the departments of Theory and Practice of Medicine, we have produced a fair amount of monographs and text-books, the most important of the latter class being those of Chapman, Eberle, G. B. Wood, and Flint. The following is a brief outline of the lives of a few who were our principal writers and teachers in this branch of medicine, but who now rest from their labours. Among them, there are few, who, in their day, had a more extended reputation, or were more popular than Dr. Nathaniel Chapman.

Born in Virginia in 1780, he received an excellent general education, became a pupil of Dr. Rush, with whom he was a favourite, graduated at the University in 1800, then spent three years in Europe, one as a pupil of Abernethy, and two at Edinburgh, and in 1813 was elected to the chair of Materia Medica in his Alma Mater, to be exchanged in 1816 for that of the Theory and Practice of Medicine, which he held until 1850, when he resigned. He died in 1853. His "Therapeutics and Materia Medica," published in 1817, was the best work of the kind in English at that date. He was the first President of the American Medical Association after its permanent organization; President of the American Philosophical Society, a popular lecturer, a genial companion, and in his prime probably the most distinguished physician in the United States. He edited, for seven years, the Philadelphia Journal of the Medical and Physical Sciences. Many of his lectures were published in the "Medical Examiner," in 1838-40. Two volumes of these lectures were published in 1844, and a compendium of his course on theory and practice was issued in 1846.

Contemporary with Dr. Chapman, and for twenty-five years associated with him as a teacher, was Dr. Samuel Jackson, 1787–1872, a native of Philadelphia, and educated in the University of Pennsylvania, having graduated in medicine in 1808. From 1825 to 1863, he was Professor of the Institutes of Medicine in his Alma Mater. His "Principles of Medicine" (Philadelphia, 1832, 8vo.) was a treatise on pathology, founded on the doctrines of Broussais, and received high praise in its day. It was also the subject of a long and acrimonious critical review by Dr. Caldwell. The popular story that Dr. Jackson recalled all the copies of this work that he could is incorrect; the entire edition was sold in the usual manner, and the publishers desired to issue another, but the author refused, on the ground that the science was undergoing such rapid and great changes that he would feel it necessary to re-write the entire work, a labour which his health and the demands of his private practice would not allow him to undertake. His most important writings are contained in the American Journal of the Medical Sciences, the last being a paper on a rare disease of the joints, in the July Number for 1870.

Dr. John Eberle, 1788–1838, was of German descent, and a native of Pennsylvania. After graduating in medicine in 1809, he went into politics, edited a newspaper, acquired intemperate habits, and became a bankrupt. Commencing life again, in 1825 he took the chair of Theory and Practice in the Jefferson School, which he held until 1831, when he removed to Cincinnati, and became connected with the Faculty of the Medical College of Ohio. In 1837, he removed to Lexington, Ky., to accept a chair in the Transylvania School, but could not lecture, and soon died. His treatise on the Practice of Medicine, first published in 1829, was, in its day, a very popular work, in part at least because of the formulæ which it contained, but is now forgotten.

Dr. Elisha Bartlett, born in Rhode Island in 1804, died 1855, graduated in medicine at Brown University in 1826, after which he spent a year in Paris. He held Professorships at Woodstock, Vt., Pittsfield, Mass., Dartmouth, Baltimore, Lexington, Louisville, and finally, in 1850, in the University of the City of New York. Of the numerous productions of his pen, the most noteworthy are the "Inquiry into the Degree of Certainty in Medicine," etc., Philadelphia, 1848; "The History, Diagnosis, and Treatment of Typhoid and Typhus Fever," Philadelphia, 1842; and, "The History, Diagnosis, and Treatment of the Fevers of the United States," Philadelphia, 1847; of which, three subsequent editions were issued. To these may be added his essay on the Philosophy of Medical Science, in which the importance of facts and observations is insisted on, and all theorizing is denounced, in accordance with the teachings of Louis.

Dr. David Hosack, 1769–1835, a native of New York, graduated as Bachelor of Arts at Princeton in 1789, and as Doctor of Medicine in the University of Pennsylvania in 1791. After practising a year at Alexandria, Va., he spent two years in Edinburgh and London. Returning to New York, he entered into partnership with Dr. Samuel Bard, was appointed Professor of Botany in Columbia College in 1795, to which was added the chair of Materia Medica, in 1797. In 1807, he was chosen Professor of Surgery and Midwifery in the newly-formed

College of Physicians and Surgeons of the State of New York, and in 1813, took the chair of Theory and Practice. In 1826, he resigned, with others, and went into the Rutgers Medical College. His writings appear in the philosophical transactions, in the "Medical and Philosophical Register," of which he was the founder, and as occasional lectures and pamphlets. They were collected and published as "Essays on various subjects in Medical Science," in three volumes, New York, 1824–1830. His "System of Nosology" reached two editions; his "Lectures on Theory and Practice" were edited by Dr. Ducachet, and published at Philadelphia in 1838. His most important paper was his "Observations on Febrile Contagion," and on the means of improving the Medical Police of the City of New York, N. Y., 1820. As a lecturer, editor, and writer, he exercised much influence on the profession, and his literary and scholarly tastes were imparted to his pupils, and especially to Dr. John W. Francis, who, after his graduation in 1810, became associated with him in practice. Dr. Francis was the son of a German grocer, born in New York, 1789, died 1861. He was for thirteen years Professor in the College of Physicians and Surgeons, and followed Dr. Hosack to Rutgers, the close of which ended his career as a teacher.

Dr. Joseph Mather Smith, 1789–1866, graduated at the College of Physicians and Surgeons in 1815, and was Professor of Theory and Practice of Physic, same school, 1826 to 1855, when he took the chair of Materia Medica. He contributed largely to literature through the medical journals; presented some interesting reports to the American Medical Association, and published "Elements of Etiology," a "Philosophy of Epidemics," New York, 223 pages 8vo.

For beauty of style as a writer and lecturer, Dr. Samuel Henry Dickson is pre-eminent. Born in Charleston in 1798, he graduated at Yale in 1814, and in Medicine at the University of Pennsylvania in 1819; was Professor in the Charleston Medical School from 1824 to 1831, 1833–34, 1850–7; in the New York University, 1847–50; and in the Jefferson School, 1858; he died March 31, 1872. His systematic works were not very successful, or worthy of special remark, but his journal contributions, and especially his volumes of essays, are among the most attractive literature of medicine.

John K. Mitchell, born in Virginia, 1793, took his academical degrees at the University of Edinburgh, commenced his medical studies under Dr. Chapman in 1816, and graduated in medicine at the University of Pennsylvania in 1819. After three voyages to India and China, for the sake of his health, he returned to Philadelphia, and in 1822, began to deliver lectures on Medical Chemistry in the Summer School. In 1841, he was elected to the chair of the Practice of Medicine in the Jefferson Medical College, which he filled to the date of his death in 1858. As an original investigator, and clear logical reasoner, his name stands among the highest, and is probably destined to a higher relative position in the future, than it enjoys even now. His papers on Endosmosis, Mesmerism, Ligature of Limbs for Spasm, and Cryptogamous Origin of Fevers, will be consulted, not only for the original facts which they set forth, but as models of suggestiveness, if the phrase may be permitted.

Dr. Charles Frick, born at Baltimore August 8, 1823, received the degree of Doctor of Medicine from the University of Maryland in 1845.

In 1856, he was chosen to the chair of Materia Medica in the Maryland College of Pharmacy, and in 1858, he became Professor of Materia Medica and Therapeutics in the University of Maryland. His most valuable contributions to literature are his "Analysis of the Blood," American Journal of the Medical Sciences, January, 1848; "Treatise on Renal Diseases," 1850; "On Diabetes," American Journal of the Medical Sciences, 1852; "On Urinary Calculi," American Medical Monthly, April, 1858. He died March 25, 1860, of Diphtheria, contracted from a patient upon whom he had performed the operation of Tracheotomy five days previous. All his papers are careful, conscientious reports of original observations, with the least possible amount of theory, and with direct reference to practice.

Among the diseases which have received the greatest amount of attention in this country may be mentioned yellow and malarial fevers, and diseases of the chest. Our literature on yellow fever includes over one hundred books and pamphlets, besides more than six hundred journal articles. It was the epidemic of this disease along the North Atlantic coast which gave the first impetus to medical authorship in this country, and produced a mass of controversial writings which, although of little value in a scientific point of view, were useful, as giving their authors the habit of writing for the press. The earlier books have already been referred to, but mention should be made of the writings of Felix Pascalis *Ouviere*, generally known under the name of Pascalis. Dr. Pascalis was a native of Provence, France, and was born about 1750. Having graduated in medicine at Montpellier, he went to St. Domingo, and there practised his profession until driven out by the Revolution of 1793, when he came to Philadelphia, and subsequently settled in New York, where he died in 1833. Besides his works on Yellow Fever, he wrote a treatise on Syphilis, New York, 1812, and contributed papers to journals. He was one of the editors of the Medical Repository.

Another writer on Yellow Fever who seems to be little known except in the South is Dr. J. L. E. W. Shecut, a native of South Carolina, born in Beaufort, 1770; died in Charleston, 1836. He studied under Dr. Ramsay, of Charleston, graduated M.D. at Philadelphia in 1791, and at once commenced practice in Charleston.[1] His most important essays were collected and published in one volume, Charleston, 1819, under the title of "Shecut's Medical and Philosophical Essays." This book, which is quite rare, contains his account of the yellow fever of 1817, first published in that year, and also his "Essays on Contagions and Infections," first published in 1818, and should be consulted by those who wish to trace the history of opinions in the South relating to this disease.

The principal work on Yellow Fever, which includes the information of all others of a prior date, is that of Dr. Réne la Roche, published in 1855. Dr. La Roche was of French descent, born in Philadelphia, in 1795, his father being an emigrant from St. Domingo. Unlike the majority of prominent American physicians, he was not connected with a large medical school, and his justly deserved reputation rests entirely upon his writings, and especially on his treatise on Yellow Fever, which is a model of research, and is remarkable, not only for the number, but the accuracy of its references, and the impartiality with which opposing statements are given.

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[1] For these data I am indebted to Dr. Robert Lebby, of Charleston.

The most valuable recent articles on this disease are in the New Orleans and the Charleston Medical Journals, but the great majority of them are historical and controversial.

During the course of an epidemic, physicians are too busy to make observations which require much time or care, or to make more than brief notes. The papers of Drs. Faget,[1] Logan,[2] and Sternberg,[3] giving temperature observations, make an advance in the right direction, but we lack data as to the pathological chemistry of the disease, and as to its relations with the malarial fevers. With regard to this last class of diseases, our literature is even more extensive than that of the preceding, and occupies much space in the journals of the West and South.

Our most valuable contribution to the natural history of malarial disease is the treatise of Dr. Daniel Drake, on the principal diseases of the Interior Valley of North America. This work is the "Magnum Opus," and results of the life-long labour, including extensive personal observations, literary research, and matured reflection, of a man whose fame, as compared with that of his contemporaries, will probably be greater a century hence than it is to-day, and whose name, even now, should be among the first on the list of the illustrious dead of the medical profession of the United States. The son of an illiterate Kentucky pioneer, brought up in a log cabin, attending a country school in the winter, and using the remainder of the year working on a farm, he surmounted the obstacles thus placed in his way, and by unceasing labour, joined to a sound common sense, which rose to the level of genius, took a leading position as author, editor, practitioner, and teacher. Commencing the study of medicine at the age of sixteen, he attended his first course of lectures in 1805, and his second in the University of Pennsylvania, in 1815, at the end of which he graduated. He was Professor successively in the Transylvania School, the Medical College of Ohio; a second time in the Transylvania; the Jefferson School; the Medical Department of Cincinnati College; the University at Louisville; and again in the Medical College of Ohio. He died November 6, 1852. His first publication was a pamphlet on the climate and diseases of Cincinnati, published in 1810, and reissued as "The Natural and Statistical View or Picture of Cincinnati and the Miami Country," published in 1815. This work is quite rare, and is interesting as being the germ from which sprang his great work above referred to.

He founded the "Western Journal of the Medical and Physical Sciences," which would be of much value, if for no other reason, on account of a series of essays on Medical Education, by Dr. Drake, which were published in it. These essays were issued in a separate volume, in 1832, and form, upon the whole, the most satisfactory contribution to this vexed question which this country has ever produced. He commenced the preparation of his work on the diseases of the Mississippi Valley in 1822, and the second volume was not issued until after his death. Very few of the younger physicians of this country are familiar with his writings. Of his essays on Medical Education and Diseases of North America, no second editions have been published; but if there are any books to which the hackneyed phrase of the reviewer, "No physician's library is complete without it," apply, it is to these works of

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[1] New Orleans Med. and Surg. Journal, 1873, i., N. S., p. 145.

[2] Do. do. 1874, ii. p. 779.

[3] Amer. Jour. Medical Sciences, 1875, lxx. p. 99.

Dr. Drake, as far as American physicians are concerned, and they are most distinctively and peculiarly American books, in subject, mode of treatment, and style of composition.

The dissertation of Dr. J. K. Mitchell "On the Cryptogamous Origin of Malarious and Epidemic Fevers," is an ingenious piece of reasoning, and presents a summary of all the *à priori* arguments in favor of this theory which can be advanced. The papers of Dr. Salisbury on the same subject are without value.

Upon the subject of diseases of the chest the most noteworthy monographs have been the works of Morton, McDowell, Lawson, and Flint on Consumption; of Horace Green on the Diseases of the Air-passages; La Roche on Pneumonia, and of Gerhard and Flint on Diagnosis of Diseases of the Chest. The treatise on Phthisis, by Dr. L. M. Lawson, adds another to the numerous examples of careful studies by physicians of diseases with which they are themselves afflicted. Dr. Lawson was a native of Kentucky; born 1812, died 1864. His early education was defective. At the age of twenty he was licensed to practise, but it was not until 1838 that he obtained his diploma from the Transylvania School. In 1844 he was elected to a Professorship at Lexington; from 1847 to 1853 he filled the chair of Materia Medica in the Medical College of Ohio, and then became Professor of Principles and Practice of Medicine. During the winter of 1859-60, he lectured on Clinical Medicine in the University of New Orleans. He founded, and for a long time conducted, the "Western Lancet," in which many of his lectures were published.

Dr. W. W. Gerhard, 1809-72, was a native of Philadelphia, and a graduate of the University of Pennsylvania. After taking his degree he spent two years in Paris, and became thoroughly indoctrinated with the teachings of Louis. On his return to Philadelphia he was appointed lecturer at the Medical Institute, and Assistant Clinical Lecturer to Professor Jackson. For twenty-five years he was the senior Physician to the Pennsylvania Hospital. Some of his clinical lectures appeared in the "Medical Examiner," of which he was one of the editors. His principal work was his "Treatise on Diagnosis of Diseases of the Chest," Philadelphia, 1842; second edition, 1846.

Dr. Horace Green, 1802-1866, was a native of Vermont, and a graduate of Castleton Medical College in 1824. From 1840 to 1843 he was Professor of Theory and Practice in the same school; and in 1850 took the same chair in the New York Medical College, of which he was one of the founders, continuing to lecture until 1860. In connection with this school he established, with his colleagues, the "American Medical Monthly." He was the first in this country to devote himself to a specialty, and his works on the local treatment of diseases of the air-passages attracted much attention, although they are not of a character to add permanently to his fame.

In medical jurisprudence, the systematic works of Beck, and Wharton and Stillé, and the treatise of Dr. Wormley on Poisons, are the most important, and each of them compares most favourably with any similar works in existence.

There are probably not to be found in the annals of medicine so large and valuable contributions to its literature by three brothers, as were made by the Beck family of New York.

John B. Beck, 1794-1851, graduated in Columbian College in 1813, became a pupil of Dr. Hosack, and graduated in Medicine at the

College of Physicians and Surgeons in 1817, presenting, as a thesis, a paper on Infanticide, which was published, and is still a standard work on this subject. In 1822 he assisted in establishing the "New York Medical and Physical Journal," with which he was connected for the next seven years, and in which he published numerous articles. In 1826 he became Professor of Materia Medica in the College of Physicians and Surgeons, just newly organized. His principal works, in addition to those already alluded to, were his "Essays on Infant Therapeutics," New York, 1849; second edition, 1855; and his Historical Sketch of the State of Medicine in the American Colonies; "Lectures on Materia Medica," and a collection entitled, "Researches in Medicine and Medical Jurisprudence."

Theodoric Romeyn Beck, 1791–1855, graduated at Union College, Schenectady, studied under Dr. Hosack, and graduated as M.D. at the College of Physicians and Surgeons, in 1811. He was appointed Professor of the Institutes of Medicine and Medical Jurisprudence in the College at Fairfield, in 1815. In 1817 he became Principal in the Albany Academy, and gave up the practice of medicine. In 1840 he took the chair of Materia Medica in the Albany Medical College, which he held until 1854. His great work was his treatise on Medical Jurisprudence, which appeared in 1823, in two volumes, and of which, including four English editions, ten editions were issued during the author's life.

Dr. Lewis C. Beck, 1798–1853, the younger brother of the preceding, studied medicine under Dr. Dunlop, and was admitted to practice in 1818. In 1826 he was elected Professor of Botany and Chemistry in the Vermont Academy of Medicine. This position he resigned in 1832. In 1836 he was appointed Mineralogist to the Geological Survey of the State of New York, and in 1840 was elected Professor of Chemistry and Pharmacy in Albany Medical College. His contributions to medical literature, to chemistry, meteorology, and mineralogy, were numerous. His principal medical work was his Report on Cholera, made to the Governor of New York in 1832.

The literature of obstetrics has been so fully given by Dr. Thomas, in a preceding article of this series, that further reference to it is superfluous. We will add only, with regard to Dr. Hugh L. Hodge, that he was a graduate of Princeton, a pupil of Dr. Wistar, and that his early taste was for surgery rather than obstetrics. He was induced to change his specialty by Dr. Dewees. He was afflicted with defective vision, which increased with age, and his great work on Obstetrics was produced entirely by dictation. He commenced as a lecturer in the Medical Institute, and was elected Professor of Obstetrics in the University of Pennsylvania in 1835, the rival candidate being Dr. Charles D. Meigs, a lecturer in the Philadelphia Association for Medical Instruction, who six years later obtained the chair of Obstetrics in the Jefferson School. The literary works of Dr. Meigs compare very unfavourably with those of his rival as to scientific value and exactness, but they are much more attractive to students and those who read for pleasure rather than instruction.

We have three names of American medical writers whose works should be mentioned here, viz., Coxe, Watson, and Dunglison.

Dr. John Redman Coxe, 1773–1864, was a type of the medical scholar, who loves books for their own sake, and who takes more pleasure in discovering a forgotten sentence in a folio of the fifteenth century than in original investigations in the light of the present day. Born in Trenton, New Jersey, he completed his classical education at Edinburgh, studied medicine under Dr. Rush, and took his degree of M.D. at the University of Pennsylvania in 1794, after which he continued his medical studies in London, Edinburgh, and Paris for about two years. He was elected Professor of Chemistry in the University of Pennsylvania in 1809, and of Materia Medica and Pharmacy in 1818. He filled the latter chair until 1835, at which date he retired, and was but little known thereafter. His Dispensatory[1] and Medical Dictionary[2] were useful compilations, and met an existing want. His Observations on Vaccination[3] was his best original contribution to medicine. His Inquiry on the Discovery of the Circulation of the Blood was a paradoxical attempt to disprove the claims of Harvey. His last work, and the one most in accordance with his tastes, was "The Writings of Hippocrates and Galen," Philadelphia, 1846. He founded the first medical journal published at Philadelphia, preceding that published by Dr. Benj. Smith Barton by two months, and his library was, in its day, the best collection of ancient authors on medicine in this country.

Dr. John Watson, of New York, has been alluded to in the article on surgery. His literary tastes led him to historical studies and the collection of a valuable library, and his historical sketch of ancient medicine[4] shows that he consulted and enjoyed consulting the original works of the fathers in medicine.

Dr. Robley Dunglison, a native of Keswick, England, born in 1798, was one of the most prolific of medical authors. He obtained his medical education at Edinburgh, Paris, and London; settled in the latter city, where he wrote a treatise on the diseases of children [1824], and was one of the editors of the London Medical Repository in 1823-24. In 1824 he accepted the invitation of Thomas Jefferson to fill the chair of Anatomy, Physiology, Materia Medica, and Pharmacy, in the University of Virginia. At this place he published in 1827 a syllabus of his course on Medical Jurisprudence and prepared his Medical Dictionary. In 1833 he took the chairs of Materia Medica, Therapeutics, Hygiene, and Medical Jurisprudence in the University of Maryland, and from 1836 to 1868 was Professor of the Institutes of Medicine in the Jefferson School. He died April 1, 1869. His Systems of Physiology (first edition 1832), Hygiene (first edition 1835), Therapeutics (1836), Practice (1842), and Materia Medica (1843), were popular in their day, nearly all of them passing through several editions. The work by which he will be remembered is his Medical Dictionary. The first edition of this was published at Boston in 1833, in two volumes. A peculiarity of this edition is that it contains brief biographical sketches of physicians, omitted in subsequent issues. The last edition, Philadelphia, 1874, edited by his son, is the most convenient work of the kind in existence.

Our literature on insanity and the pathology of mental disease is insignificant in comparison with the importance of the subject and the opportunities existing for its study, the only monograph of permanent value being the "Contributions to Mental Pathology," by Dr. Isaac Ray, 8vo., Boston, 1873. Considering the number and size of the asylums for the insane in this country, and the amount of money which has been spent upon them, it is rather curious that the medical officers connected with them should have contributed so little to the diagnosis, pathology, or therapeutics of diseases of the nervous system. An examination of the works relating to this subject, and more especially of the American Journal of Insanity, which is the most important, and which contains the transactions of the Association of American Superintendents of Hospitals for the Insane, will show that the thoughts of these specialists have been mainly directed to the subjects of construction and management of asylums and to the jurisprudence of insanity. This last subject is one of great and increasing importance; but our contributions to its literature consist rather of opinions and ontological speculations than of scientific observations. The annual reports of our insane asylums consist, for the most part, of business and financial statistics, and are intended for the use of appropriation committees rather than of physicians. There are some signs, however, that more attention will hereafter be given to recording of the physical phenomena of mental disease, and it is to be hoped that we may soon have some published results from the pathological department of the Utica Asylum, which will stimulate other institutions to undertake similar work. No more promising field to-day exists in medical science for valuable discoveries than in the wards and laboratory of a large, well-appointed hospital for the insane.

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[1] The American Dispensatory. Phila., 1806, 4th ed. 1818.

[2] The Philadelphia Medical Dictionary. Phila., 1808, 2d ed. 1817.

[3] Practical Observations on Vaccination. Phila., 1802.

[4] The Medical Profession in Ancient Times. 8vo., N. Y., 1856.

Upon the subject of hygiene no systematic work has yet been produced in this country, with exception of the treatise on Military Hygiene, by Dr. Hammond. One of the principal writers in this department was Dr. John Bell, a native of Ireland, 1796–1875. He came to this country with his parents, who settled in Virginia in 1810, and graduated in medicine in the University of Pennsylvania, after which he lectured for some years in the Philadelphia Medical Institute, and for two years in the Medical College of Ohio. His treatise on Baths and Mineral Waters is the only comprehensive and respectable treatise on this subject published in this country. The most important contributions to the literature of hygiene which we have produced are the reports of the various State and municipal boards of health, most of which, however, are of comparatively recent origin, and it is to be hoped are only just fairly commencing their career of usefulness.

The subject of hospital construction and hospital hygiene has been much discussed in this country, the latest production being a large and handsomely illustrated work published by the trustees of the Johns Hopkins Hospital of Baltimore.

The publications of our municipal, State, and national governments, relating to vital and medical statistics, are among our most valuable contributions to medical literature. The reports of city and State boards of health show each year evidences of more careful investigation into the probable causes of disease and the means of removing or diminishing them, and the necessity and economic value of such work is slowly but steadily becoming apparent to the educated classes of the community by means of the publications referred to.

The circulars and reports of the medical department of the army are sufficiently well known, and within the last few years a series of reports have been commenced by the Medical Department of the Navy and by the Marine Hospital Service of the Treasury Department, which it is to be hoped will become important additions to our medical literature, not only in regard to statistics, but in the departments of hygiene, pathology, and therapeutics. It should not be forgotten by the physicians of the United States that they are, to a certain extent, responsible for the condition of the medical departments of the government, since the sympathy and opinions, expressed or implied, of the medical profession at large as to the work which these departments have done, or are trying to do, furnish the encouragement and stimulus which are necessary to the continuous production of good results, and also influence to a considerable extent the action of our legislators with regard to the officers of these departments.

The reports of the Surgeon-Generals of the Army, the Navy, and the Marine Hospital Service, while ostensibly presented to the Secretaries of War, the Navy, and the Treasury, are really, in a sense, made to the physicians of the country, who are the only competent judges as to whether the work is satisfactory, and commensurate with the means which have been allowed for its performance.

Of encyclopedic works, the result of the combined labour of many authors, like the great French dictionaries, but one specimen has been attempted in this country. This was the American Cyclopædia of Practical Medicine and Surgery, edited by Dr. Isaac Hays, of which two volumes, completing the letter "A" were published at Philadelphia in 1834–36, and reissued with a new title, "Medical and Surgical Essays," in 1841. The time is perhaps not far distant when a first-class publication of this character will be sufficiently in request in this country to warrant an attempt at its production.

Reprints and Translations.—The second class of medical works referred to in our statistics, includes the reprints and translations, which cannot be overlooked in an account of our medical literature, since they have formed an important part of the libraries of American physicians, even if quantity only be considered.

Prior to the Declaration of Independence, the largest and most important medical book printed in this country was the "Lectures on Materia Medica," of Cullen, issued at Philadelphia in 1775, in 4to., and advertised as "The very cream of physic," and as "absolutely necessary for all American physicians who wish to arrive at the top of their profession."[1]

In 1776 was published, at Philadelphia, the treatise of Van Swieten on the Diseases Incident to Armies, with Ranby on Gunshot Wounds, and Northcote on Naval Surgery, forming a small volume of 164 pages, which is usually found bound with the second edition of John Jones' "Practical Remarks," etc., of the same date, and was probably the principal guide of the army surgeons during the Revolutionary War. Cullen's "First Lines of the Practice of Physic" was reprinted from a smuggled copy, in 1781, at Philadelphia, in two volumes, 8vo., and five later American editions, the last edited, with a great flourish of trumpets, by Dr. Caldwell, in 1822, attest its popularity.

For thirty years after the Declaration of Independence, the majority of the reprints were works of English and Scotch writers, and especially of the Edinburgh school, the favourite authors being Cullen, Brown, John Hunter, Benjamin Bell, Denman, Smellie, Hamilton, Beddoes, and

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[1] A copy of this work was purchased by the Library of the Pennsylvania Hospital 1780, for £135 5s. currency, equal to £1 15s. specie.

Robert Jackson. The largest edition sold was probably of the "Edinburgh New Dispensatory." The only translations of French or German medical works issued in this country prior to 1800 were, Swediaur on Venereal, New York, 1788, and Blumenbach's "Elements of Physiology," Philadelphia, 1795. The first medical book printed in Louisiana was "Médicaments et précis de la Methode de M. Masdevall," a pamphlet of 48 pages, relating to the yellow fever, issued in 1796.

The beginning of the influence of the French schools, which for the next fifty years was so powerful in the United States, especially in surgery, is marked by the editions of Boyer and Desault, Philadelphia, 1805, to which rapidly succeeded the works of Alibert, Richerand, and Bichat. In this connection may be permitted a reference to two works which are omitted from our statistics, since they were intended for non-professional use, but which had an extensive sale, and indirectly exerted a very considerable influence, viz., Buchan's Domestic Medicine, of which several editions were issued, the most important being that of Philadelphia, 1795, revised by Dr. S. P. Griffitts, and the "Primitive Physic," of John Wesley, of which there are several American editions of the last century.

Many foreign medical works have been issued in this country in connection with periodicals, such as the "Register and Library of Medical and Chirurgical Science," published at Washington, D. C., 1833-36, in which were issued "Bell on the Nerves," "Lawrence on the Eye," Velpeau's Surgery, etc.; The Select Medical Library, edited by John Bell; the American Medical Library, published under the supervision of Dr. Dunglison; and the "Medical News and Library," in which some valuable books have been issued.

The number of translations of French medical works which have been published in this country is one hundred and forty-eight (148). One hundred and one of these were issued prior to 1842, and only eight have appeared within the last ten (10) years.

The number of translations of German works issued has been sixty-four (64), of which but fourteen (14) were issued prior to 1842, and twenty-eight (28) within the last ten years.

The number of reprints of English medical books has been five hundred and eighty-four (584), thirty (30) of these were issued prior to 1800; two hundred and seventeen (217) during the next forty years, and three hundred and thirty-seven (337) since 1840, the production gradually increasing.

It is largely to French and German sources that we owe our works on pathology, pathological anatomy, pathological chemistry, and physiology.

The best systematic treatise on the practice of medicine from the German, published in this country, was that of Niemeyer, in 1869, the name of the author having been made somewhat familiar to the American public by a translation of his lectures on Phthisis, published the year previous. The works of Billroth on General Surgical Pathology, New York, 1871, Rindfleisch, a Text-book of Pathological Histology, Philadelphia, 1872, are the books which are to-day directing the work of the younger professional men of the country. The Cyclopædia of the Practice of Medicine, edited by Ziemssen, now in course of publication, is the most extensive medical work, native or foreign, which has ever been issued in the United States, and is probably destined to exercise great influence upon our investigation of diseases, whatever it may do for the practice.

Of the translations from the French, the most important have been those relating to anatomy, physiology, and surgery. The favourite authors have been Bichat, D. J. Larrey, Boyer, Orfila, Magendie, Laennec, Cazenave, Baudelocque, Louis, Velpeau, Broussais, Cazeaux, Colombat, Ricord, Vidal, and Malgaigne.

It would be useless to give lists of the titles of these; it is sufficient to say that they include nearly every important monograph or text-book produced by English writers: from Cullen, Brown, and Darwin, to Bennett, Watson, and Aitken; from John Hunter, Benjamin, John and Charles Bell, Pott, Hey, and the Coopers, to Erichsen, Paget, and Holmes; and from Hamilton and Smellie to Simpson, Barnes, and Duncan. The works of nearly all the great English teachers have been quickly reproduced on this side of the water, and their modes of treatment are those followed by the majority of our practitioners.

A few medical books have been printed in Spanish at Philadelphia, for the Mexican trade, including the "Compendio de la Medecina," by J. M. Venegas, 1827. The number of reprints in this country has been largely due to the want of an international copyright law, for which reason publishers found it much cheaper to take the work of an English author gratis, than to pay an American writer for his MS. Sometimes the name of an American physician is given as editor of the reprint, but in most cases, this means little more than that he approves the book, the so-called editing being imperceptible. To this remark a few honourable exceptions should be made, such as the additions by John Bell to the lectures of Stokes, of Gerhard to Graves; the reprints of Copland's Dictionary, in which the bibliographical additions, made by Dr. Charles A. Lee, are numerous and valuable, the editions of Velpeau's Surgery by Mott and Blackman, and the editions of Aitken's Practice by Dr. Clymer, who has added much to the completeness of the work.

This so-called editing was the subject of some caustic criticism, and has of late years almost entirely disappeared. With regard to the merits of the International Copyright question, there has been much discussion. On the one side, it is truly said that the desire for books increases by the supply, and that the sale of the cheap reprints produces a market for indigenous productions. On the other side, it is affirmed with equal truth, that it deprives our own writers, to a great extent, of pecuniary inducements to labor. The question is one to be decided, however, by the laws of morality rather than expediency, and the majority of educated non-interested parties agree that the passage of an international copyright law would be an act in accordance with the dictates of common honesty and justice.

Undoubtedly, the cheapness and abundance of these republications have done much to diffuse knowledge among our practitioners, and the libraries of many physicians have been mainly composed of the "pepper and salt sheepskin covered Philadelphia reprints." Of late years there has been a marked improvement in the quality of paper and typography of our medical books, while the stout bindings of sheep and calf of fifty years ago, have been largely superseded by the more showy, but, at the same time, more flimsy cloth bindings now in vogue. The German fashion of publication in parts has been almost unknown, except as connected with periodicals, and it is to be hoped that it may be long before the annoyance and confusion which attends the Lieferung and Hefte may be connected with our medical publications. "The American Clinical Lectures," edited by E. C. Seguin, and published by G. P.

Putnam & Sons, look in this direction most unpromisingly, and the publication of such totally unconnected papers, in a series of continuous paging, even if special paging is added, must be unhesitatingly condemned by all who have occasion to either make or to verify bibliographical references to them.

It may be of interest to refer to some statistics of the locality of publication of these works. Of class one (I) we find that three hundred and seventy-three (373) first editions were published in Philadelphia, one hundred and seventy-three (173) in New York, eighty-one (81) in Boston, twenty-four (24) in Cincinnati, sixteen (16) in New Orleans, and fifteen (15) in Baltimore, leaving ninety-six (96) published elsewhere. If each edition be reckoned as a separate work, we find that six hundred and thirteen (613) have appeared in Philadelphia, two hundred and twenty-six (226) in New York, ninety-six (96) in Boston, and eighteen (18) in Baltimore. Of the reprints and translations, six hundred and eighteen (618) books, or seven hundred and fifty-three (753) editions have been issued from Philadelphia, one hundred and seventy-seven (177) books, or two hundred and nineteen (219) editions from New York, eighty (80) from Boston, and ninety-four (94) elsewhere. It appears then that more than one-half of our medical books have been published in Philadelphia, and about one-fifth in New York. The firm of Carey, Lea & Carey, now H. C. Lea, has published nearly six hundred editions of medical works; and those of Lindsay & Blakiston, and Lippincott, each between one and two hundred. In New York, the principal publishing house is that of S. S. & W. Wood, now Wm. Wood & Co., which has issued about one hundred and fifty (150) editions.[1]

Medical Journals.—It is not in text-books or systematic treatises on special subjects that the greater part of the original contributions to the literature of medicine have been first made public during the last century, either in this or other countries. Since the year 1800 medical journalism has become the principal means of recording and communicating the observations and ideas of those engaged in the practice of medicine, and has exercised a strong influence for the advancement of medical science and education.

To this class of literature this country has contributed a noteworthy share. Excluding those devoted to dentistry, pharmacy, popular hygiene, and "isms" of various kinds, we find that one hundred and ninety-five medical journals have been commenced in this country, including reprints of foreign journals, making in all one thousand six hundred and thirty-seven volumes, or a greater bulk than the text-books and monographs.

Prior to the establishment of medical periodicals, there was little or no encouragement or opportunity for a physician to record his observations. The professor in a medical school might, in an introductory notice to the thesis of one of the students—the so-called programma or propempticon inaugurale—make a statement, not to exceed sixteen pages upon any subject, whether connected with that treated of in the thesis or not, and sometimes such a paper was continued through the programmata of twenty or thirty different dissertations, making it very difficult at the present day to secure the entire work.

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[1] The figures of this distribution among publishers are only an approximation, and are probably too small, since the publishers' names are not stated in many of the lists of books from which titles have been derived.

But if the country doctor had a communication to make to his brethren, he must either do it by a pamphlet printed at his own expense, or must forward it to some one connected with a medical school or scientific association, and trust to him that it should be made known and recorded. The professors themselves, as was natural, gave the greater part of their thought and labour to their systems, theories, and commentaries.

It was the day of large books, and unless one could produce a volume, he received little encouragement to write. At the present day, the demand for brief papers and reports of single cases, exceeds the supply.

The weekly and monthly periodicals are omnivorous and insatiable in their requests for contributions. Through the medical journals have been given to the world nearly all the discoveries which the science and art of medicine owes to American physicians. They furnish the original data which are the foundations of monographs and text-books, and their files remain interesting and valuable when the latter have become obsolete and are forgotten.

Medical journalism in the United States presents some peculiarities, although not nearly so many as is commonly supposed, and has been the subject of severe, and, to some extent, merited criticism; but while it includes some of the worst, it also contains the best of our medical literature, and some details as to its rise, progress, and character, may therefore be of interest.

The first medical journal printed in this country was a selection and translation from the "Journal de Médecine Militaire," issued in Paris from 1782 to 1788. This translation was published in New York about 1790, forming a volume of one hundred and twenty pages 8vo., which is quite rare.[1] The original journal from which this is made up is one that is valuable to the army surgeon; and the reprint is here referred to as being the first medical journal printed in the United States, and because the fact of its existence is probably known to very few.

The first American medical journal was a quarterly, "The Medical Repository," edited by S. L. Mitchell, Edward Miller, and E. H. Smith, and published at New York, from 1797 to 1824. That this met an existing want is shown by the fact that the demand for the earlier volumes was sufficient to warrant the issue of a second edition of the first and second volumes in 1800, and a third edition of the same volumes in 1804–5.

Dr. Elihu H. Smith, the projector of this journal, was born in Connecticut in 1771, graduated at Yale in 1786, and died in 1798. Although so young, he had edited several works, and contributed largely to literary periodicals, as well as to his own medical journal.

Dr. Samuel L. Mitchell, 1764–1831, studied under Dr. Bard, and graduated in medicine at Edinburgh, in 1786. As Professor of Chemistry and Natural History in Columbia College, and from 1820 to 1826 of Materia Medica and Botany, chief editor of the "Medical Repository," representative in Congress in 1801–4, and 1810–13, and United States Senator, 1804–9, he lectured and wrote upon almost all subjects, and his papers are scattered through various periodicals at home and abroad. He was rather a naturalist than a physician, and has very properly been called a "Chaos of Knowledge."

Dr. Edward Miller, 1760–1812, was a native of Delaware, and a graduate of the Medical Department of the University of Pennsylvania in 1789. In 1807 he accepted the chair of the Practice of Physic in the College of Physicians and Surgeons, and in 1809 was appointed one of the Physicians to the New York Hospital. His writings were collected and published in one volume in 1814, the most important being his papers on Yellow Fever.

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[1] "A Journal of the Practice of Medicine, and Surgery and Pharmacy in the Military Hospitals of France. Published by order of the King. Reviewed and digested by M. De Horne, under the inspection of the Royal Society. Annotated from the French by Joseph Brown. No. I., vol. i., New York: J. McLean & Co."

The idea of the publication of the "Medical Repository" was probably taken from the "Annals of Medicine" of Duncan, a continuation of the "Medical and Philosophical Commentaries of Edinburgh," and of which the "Edinburgh Medical Journal" of the present day is the successor. Although, owing to the tastes of Dr. Mitchell, it contains many dissertations which are now obsolete, the entire set of twenty-three volumes is even to-day well worthy of a place in the physician's library. At its close its subscribers passed to the "New York Medical and Physical Journal," and from that time, New York city has never been without a medical periodical.

Thirty-one medical journals have been commenced in that city, besides nine devoted to specialties, and six reprints of foreign journals. The most important of these, in addition to those already named, are the "American Medical and Philosophical Register," edited by Drs. Hosack and Francis, 1810–14; the "New York Medical Magazine," edited by Mott and Onderdonk, the "New York Journal of Medicine and Surgery," 1839–41, one of the best journals in this country, edited by Drs. Watson and Swett, the "New York Journal of Medicine," edited by Forry, Lee, Stephen Smith, and others, continued as the "American Medical Times," of which the "Medical Record" of to-day may be considered as the representative; the "New York Medical Journal," edited successively by Drs. Hammond, Dunster, and Hunter, 1865–76, and the "Archives of Scientific and Practical Medicine," edited by Brown-Séquard, 1873, which unfortunately ceased with its fifth number. The "Buffalo Medical Journal," edited by Dr. Austin Flint, 1845–60, and then merged in the "American Medical Monthly," is also a valuable series.

The second medical journal published in this country was the "Philadelphia Medical Museum," edited by Dr. Coxe, 1804–1811, followed almost immediately by the "Philadelphia Medical and Physical Journal," edited by B. S. Barton, and published at irregular intervals, 1804–1809. This journal, as was to be expected from the tastes of its editor, contains a large proportion of articles on natural history. Other well-known journals published in Philadelphia are the "American Medical Recorder," a quarterly, 1818–29, whose subscription list passed to the "American Journal of the Medical Sciences;" the "North American Medical and Surgical Journal," 1826–31; the "Medical Examiner," 1838–56, which united with the "Louisville Review," forming the "North American Medico-Chirurgical Review," 1857–61; the "Medical and Surgical Reporter," 1856–76; the "Photographic Review of Medicine and Surgery," 1870–72; and the "Philadelphia Medical Times," 1870–76.

The most important journal on our list is the "American Journal of the Medical Sciences." This began as the "Philadelphia Journal of the Medical and Physical Sciences," in 1820, under the editorship of Dr. N. Chapman, who is said to have undertaken it under the stimulus of the phrase of Sidney Smith, so often quoted during the past year: "Who reads an American book?" In 1825 a new series began, edited by N. Chapman, W. P. Dewees, and J. D. Godman. This continued until 1827, when Dr. Isaac Hays, who had been associate editor in the last volume—number five of the new, or fourteen of the whole series—took charge of the Journal and gave it its present name. The ninety-seven volumes of this Journal need no eulogy. They contain many original papers of the highest value; nearly all the real criticisms and reviews which we possess; and such carefully prepared summaries of the progress of medical science, and abstracts and notices of foreign works, that from this file alone, were all other productions of the press for the last fifty years destroyed, it would be possible to reproduce the great majority of the real contributions of the world to medical science during that period. It is evident that its editor has exercised a careful supervision over every part, but his personality is nowhere apparent, there being no editorial articles, and very few papers appearing over his signature.

Baltimore produced the third of our medical journals, the "Baltimore Medical and Physical Recorder," edited by Dr. Tobias Watkins, 1808–9. This only reached number one (1) of the second volume, and it is somewhat curious that of the ten medical journals and one reprint which have been commenced in that city, the duration of each has been comparatively brief. One little known may be referred to, "The Baltimore Philosophical Journal and Review," edited by Dr. J. B. Davidge, of which one number was published in 1823. It contains "a memoir on fractures of the thigh-bone," and "a case of extirpation of the parotid," each by the editor.

The first medical periodical published in Boston was of a popular character, "The Medical and Agricultural Register," 1806–7. The "New England Journal of Medicine and Surgery" began as a quarterly in 1812, and in 1828 was consolidated with the "Boston Medical Intelligencer," and became a weekly, forming "The Boston Medical and Surgical Journal," which has continued to the present time. The original quarterly was well edited, and contains some valuable papers. Under the editorship of Dr. J. V. C. Smith, which lasted for over fifty volumes, it would seem that no articles were ever refused admission to the weekly. As stated by Dr. Hunt,[1] "John C. Warren and X. Chabert were received with equal courtesy. In its department of reviews it was most complacent. From Rokitansky to Mrs. Joel Shew all were erudite. On its editorial pages nothing was attacked, everything was conciliated. Legitimate medicine was right to be sure, but the community would appreciate it better if it were not quite so right. Contributors of merit dropped off, and the journal became the receptacle of more 'remarkable cases' than any other was ever blessed with." From the date of this criticism there has been great improvement, and it is to-day one of the best.

The first medical journal west of the Alleghanies was the "Western Quarterly Reporter of Medical, Surgical, and Natural Science," edited by John D. Godman, Cincinnati, 1822–23, which reached number two of the second volume. This was followed by the "Ohio Medical Repository," edited by Guy W. Wright, issued semi-monthly, Cincinnati 1826–27. This has become one of the rarest of American medical journals. The only articles of interest which it contains are a series of papers by Dr. John Locke, on the Medical Botany of the West, and a few reports of cases and contributions to pathological anatomy, by Dr. John P. Harrison. (This journal must not be confounded with another of the same name, published at the same place, in 1835–36.) It was merged into the "Western Medical and Physical Journal," edited by Drs. Daniel Drake and Wright.

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[1] Buffalo Medical Journal, 1856, xii. p. 312.

At the end of the first volume, in 1828, the editors agreed to disagree, and Dr. Wright published one number of a second volume, but the real continuation was issued by Dr. Drake, under the title of the "Western Journal of the Medical and Physical Sciences." This contained some of Dr. Drake's best and most characteristic writings, and forms a valuable and interesting series.

Two attempts were made by Dr. Eberle to establish a journal at Cincinnati; the first, the "Western Medical Gazette," after one or two suspensions, ceased with the second volume, in 1835; the second, the "Western Quarterly Journal of Practical Medicine," 1837, did not get beyond the first number. "The Western Lancet," edited by L. M. Lawson, continued from 1842 to 1857, when it took the name of "The Cincinnati Lancet and Observer," which is still flourishing. Several medical journals were started at Columbus, only one of which, "The Ohio Medical and Surgical Journal," 1848–64, was successful. A rare medical periodical and curiosity in its way is "The Belmont Medical Journal," published at Bridgeport, Ohio, under the auspices of the Belmont County Medical Society, 1858–60. With this belong the transactions of the same society from 1847 to 1857, forming in all, three small volumes in 12mo. These publications are unique in their way, and illustrate what can be done by a county medical society, composed entirely of country practitioners. They contain some amusing flights of rhetoric, and some well-recorded cases, and many of the papers are interesting because it is evident that they were writien precisely as the authors talked.

The first medical journal of Kentucky was the "Transylvania Journal of Medicine," a quarterly, published at Lexington, from 1828 to 1839, forming a series of twelve volumes, of which complete sets are rare and valuable. In 1840 commenced "The Western Journal of Medicine and Surgery," Louisville, 1840–55, which may be considered as a continuation of Dr. Drake's "Western Journal," above referred to, combined with the "Louisville Journal of Medicine and Surgery," edited by Drs. Yandell, Miller, and Bell, in 1838, and of which but two numbers were published.

"The Richmond and Louisville Medical Journal," now in course of publication, edited by Dr. E. S. Gaillard, 1868–76, is a continuation of the "Richmond Medical Journal," published at Richmond, Va., 1866–68. "The American Practitioner," edited by Drs. D. W. Yandell and T. Parvin, 1870–76, is a continuation of the "Cincinnati Journal of Medicine," commenced in Cincinnati in 1867.

"The Illinois Medical and Surgical Journal" commenced at Chicago in 1844, and has continued to the present time under various names, being now known as "The Chicago Medical Journal and Examiner."

The first journal published west of the Mississippi was "The St. Louis Medical and Surgical Journal," founded by Dr. M. L. Linton, in 1843, which is still in existence.

In the South the first medical periodical was the "Journal de la Société Médicale de la Nouvelle Orleans," a quarterly, published in 1831. A monthly journal of the same name appeared in 1859–61. The most important is the "New Orleans Medical and Surgical Journal," which, with two suspensions, has continued from 1844 to the present time. "The Southern Medical and Surgical Journal," edited by Anthony Eve and others, published at Augusta, forms a series of twenty-one volumes, which contain many valuable cases, papers, and reports. "The Charleston Medical Journal and Review," 1846-60, and 1873-76, is the principal medical periodical of South Carolina.

In Tennessee, "The Nashville Journal of Medicine and Surgery," 1851-61, and 1866-76, and "The Southern Journal of the Medical and Physical Sciences," 1853-57, are worthy of note.

The principal medical journal in Virginia was "The Virginia Medical and Surgical Journal," edited by G. A. Otis and others, Richmond, 1853-61. In the same city was published, during the war, "The Confederate States Medical and Surgical Journal," 1864-65, a quarto sheet containing much valuable data in military surgery. Complete files of this are very rare.

On the Pacific coast eight medical journals, in all, have been commenced, two of which did not get beyond the first number. The oldest one now in existence is "The Pacific Medical and Surgical Journal," which began in 1858.

Five medical journals have been commenced in Michigan, two of which are now in existence.

Connecticut, Iowa, Maine, Minnesota, New Hampshire, New Jersey, Oregon, Vermont, and West Virginia have each had one journal, all of which are now extinct except "The West Virginia Medical Student." Perhaps two may be claimed from Maine, counting "The Journal of the Medical Society of Maine," one number of which was issued at Hallowell in 1834.

Of journals devoted to dentistry there have been about twenty, making one hundred and thirty volumes in all.

The earliest one was the "American Journal of Dental Science," which commenced in New York, in 1839, was suspended from 1860 to 1867, and is still in existence.

In 1876 there are four dental journals in existence in this country, while England has but one, France two, and Germany one.

Of journals devoted to pharmacy, there have been six worth mentioning; the oldest being the present "American Journal of Pharmacy," which began in 1825, as the "Journal of the Philadelphia College of Pharmacy." This journal is by far the most valuable of this class in this country, and is furthermore noteworthy, and to be specially commended for having done what no medical journal in this country has accomplished, namely, the publishing of a complete index for its series, which was done in 1873, and which doubles the practical value of the set. The total number of volumes published of this class is ninety-four.

Besides the regular encyclopedic medical journals, there have been about as many more devoted to "isms" and "pathies," and to popular and family medicine and hygiene, many of these last being merely advertisements.

With the recent development of specialties in medicine, several journals devoted to particular subjects have appeared, and an increase in the number of these may be expected.

In this connection may be mentioned, as a curiosity in literature, a periodical publication devoted to the abuse of an individual physician, namely, the "Rush Light," published in New York in 1800, by William Cobbett, under the pseudonym of Peter Porcupine, for the vilification of Dr. Benjamin Rush. Seven numbers were issued, of which only the first two bore the imprint of place of publication, the last two were printed in London, and a complete set is very rare.

A most powerful agent for the diffusion in this country of the knowledge of the labours and writings of European physicians, has been the republication of the principal English Quarterly Reviews, of "Braithwaite's Retrospect," and of "Ranking's Abstract." To this should be added, perhaps, the so-called "American Edition of the London Lancet," which is a selection rather than a reprint, and the subscription list of which was at one time very large.

Of journals printed in foreign languages, there have been commenced, three in German, three French, and one Spanish. The French journals were all issued at New Orleans: two of the German journals appeared in the State of New York, and one in Philadelphia.

The Spanish journal was intended mainly for circulation in Cuba.[1] Its issue ceased with the third number.

Our medical journals vary so much in character, style, and purpose, that it is hardly possible to make any assertion with regard to the mass which shall be at the same time broad and true. They may be divided into three classes: first, those not connected with any medical school, and which draw their contributions from a wide field, including such as the "American Journal," "The New York Journal," "The Medical Record," "The Medical Times," and "The Boston Medical and Surgical Journal;" second, those which rely for contributions and material mainly on the professors of a medical school and the hospital clinics connected with it, but which are not specially devoted to its interests; third, those which are mainly devoted to advocating the interests of a school, and the attacking rival institutions, and which are, to use Carlyle's phrase, "Windmills put out to catch or take advantage of the wind of popular favour." These journals sometimes contain valuable reports of cases obtained from the college clinics, but the personal editorial element in them is usually in excess, and they are of interest to but a small local circle. To them applies the untranslatable French criticism, "Il y a trop de tintamarre la dedans, trop de brouillamini."

Of the first class, some compare favourably with the best of the journals of other countries: of the last class, some are as bad as, but not worse than, the worst. Comparatively few persons are acquainted with the poorer class of foreign medical journals, published in the smaller towns of the provinces, which have most of the defects which are so strongly condemned in some of our own publications as if they were unique.

The reports to the American Medical Association, by its committees on American Medical Literature, devote much space to periodicals, and contain many judicious criticisms upon their defects and errors. A common complaint is that there are too many. The reply to this is usually that of Dr. Drake, that it is desirable that the country practitioners be induced to write, and that one means of doing this is the diffused localization of journals. This is due to the fact that inexperienced and modest men will furnish an article or report to a journal in their immediate neighbourhood, with whose editor they are personally acquainted, while they would not do so to one at a distance.

The number of subscribers to the greater number of our journals is small, the issue being, for many, less than a thousand, and, for some, hardly five hundred copies.

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[1] "Revista Medico-Quirurgica y Dentistica." Quarterly. New York and Havana, 1868.

The motive for the existence of the minor journals is not for direct profit, but as an indirect advertisement for certain individuals, or—and this is more common—the desire to have a place in which the editor can speak his mind and attack his adversaries without restraint. The defects in the medical journals are, to a certain extent, the characteristic ones in our medical literature, and are chargeable mainly to the lack of general education and mental culture in the majority of readers whose tastes are to be accommodated. An urgent want of many of the subscribers is a sort of continuation of the course of education given in the schools. We find, for instance, in the pages of some medical journals, articles which make no pretensions to originality, but are simply didactic lectures to a class *in absentia*. The defects in the so-called original contributions are, for the most part, due to imperfect education in the writers, and betray, not merely an ignorance of facts previously ascertained and recorded, but defective mental training and an inability to comprehend the relations of the facts which are known, the result of which is the stringing out of a series of irrelevant and tedious details, and, in the attempts at deduction, the production either of vague and valueless generalizations, or conclusions which do not follow from the premises. As an illustration, take the majority of the articles which have appeared on a disease which would seem to be peculiar to this country, viz., the so called "milk-sickness" or "trembles."

Since the first notice on this affection in Dr. Drake's Notices of Cincinnati, in 1809, there have been printed four pamphlets and one hundred and ten (110) articles in journals and transactions, on this subject. Yet it cannot be said to-day, that we have any definite knowledge as to the pathology or causes of this affection, or that, so far as man is concerned, we are absolutely certain that there is any special disease which should be thus named, as being caused by the milk, or flesh of cattle affected with the "trembles." It has been said to be caused by certain plants, yet no scientific experiments have been made on the effects of these plants. No attempt has been made to produce the disease in an animal remote from infested localities, by the use of the suspected plants, or better, by the use of an extract containing their active principles; no chemical or microscopical examinations have been made, in short, we have nothing but an account of symptoms, and much of that is from hearsay.

Many articles intended to be practical, are very far from being such, although the authors would probably be surprised and indignant to hear them termed otherwise. They profess to give the results of the writer's personal experience with a certain disease, but this disease is only named, not described, and the gross results only are given, that is to say, we are told how many recovered. The object of such writers, to use their own words, is to tell us "what is good for biliousness, or low fever, or pneumonia." Their productions read curiously, like the literature of the last century, and are to be classed with old women's advice; amusing generally; practically suggestive sometimes; clear, scientific, and conclusive, never.

The so-called clinical lectures, and reports of cases and operations, are of two kinds. When properly prepared they are most useful and valuable, and are the best contributions to a journal which the majority of physicians can make, although by no means the highest class of medical literature. But a large number of such articles as are published, are simply padding, worse than useless, since their titles become a part of the bibliography of medicine, compelling each succeeding inquirer to refer to them, or risk the loss of some really valuable reference.

We have reached that stage of development, when it is in no way desirable that we should be informed that one dislocated shoulder was reduced, one leg amputated, and two hare-lips operated upon, not even if the usual text-book explanations are added, so as to make up the five or six pages of the report of a college clinic. We have had enough reports of specimens of "Aneurism of the Aorta," or "Medullary Sarcoma," or "Tumour of the Breast," in which little or no information is given with regard to the symptoms during life, and the principal fact stated is the size or weight of the specimen.

It is a useless case of labour which lingers through three or four pages, to terminate in the usual manner with the stale old moral about "meddlesome midwifery," and it is at once amusing, exasperating and pathetic, to glance over the "contributions from the clinic" of the young specialist who has set to work to write himself into notice, not in a journal devoted to his specialty, but in one of the encyclopedic periodicals, having been instructed that this is "legitimate advertising."

"Medical journalism is not a profession in this country. With one or two exceptions, our medical editors are engaged in practice and lecturing, and their labour in connection with the journals is not directly remunerative, nor is it the main object of their thoughts." The result of this appears in that large section of almost every journal which is devoted to reviews, abstracts, news items, etc. Nevertheless, as we have before stated, our medical journals are the most important and valuable part of our medical literature, and it is mainly in and by them that improvement may be hoped for and effected.

At the beginning of 1876, there were in course of publication throughout the world about 280 regular medical journals. Of this number, Germany and Austria had 57; France 52; Great Britain, not including her Colonies 29; the United States 46; Italy 31; Belgium 8; Mexico 8; Canada 7; Holland 6; Spain 6. As to the form of publication, the United States has the largest proportion of monthlies, and France and Germany of weeklies and bi-weeklies.

The proportion of periodical to other forms of medical literature is in excess in this country, as will be clearly seen if we compare the number of medical books published in the several countries. Taking the "Bibliotheca Medico-Chirurgica," of Ruprecht, for the years 1874–75, and counting the publications noted in it, excluding journals, pamphlets, and popular and irregular works, we find that the United States is credited with 55 volumes; England 179; France 409; Germany 419; Italy 120; Spain and Portugal 104. If we count only first editions of original works, we find that the United States has published during these two years 36; England 92; France 314; Germany 288; Italy 88; and Spain and Portugal 30.

These figures are, of course, not exact, but the proportions shown are probably nearly correct. Taking the number of volumes of medical publications of all nations, excluding journals, for these two years, the United States has published about six per cent. of the whole, certainly not the quantity which should have been produced if everything was as it should be.

Medical Societies.—An important influence upon the progress of medicine, and the relations of physicians to each other, and to the public, has been exerted by our medical societies, some of which date from the last century, and which are found almost everywhere. The first State medical societies, such as those of New Jersey, Massachusetts, Delaware, New York, etc., were charged with the duty of licensing persons to practise medicine, to which license an examination was a necessary preliminary. In this way these societies were the principal agents in fixing the standard of medical education, and although after the establishment of medical schools the diploma of one in good repute was accepted in lieu of an examination, this was by courtesy rather than law, and made it necessary that the standard of the schools should at least be equal to that prescribed by the society. For convenience of reference, we give a list of the most important medical societies of the United States, arranged in alphabetical order by States:—

	Organized.	First publication.	No. of vols. of publications.
American Medical Association	1847	1848	27
American Ophthalmological Society	1864	1865	7
American Otological Society	1868	1869	1
American Pharmaceutical Association	1852	1852	24
American Public Health Association	1872	1875	1
National Quarantine and Sanitary Convention	1857	1857	4
Medical Association of the State of Alabama	1847	1848	19
State Medical Association of Arkansas	1870	1871	5
Medical Society of the State of California	1870	1870	6
Territorial Medical Society of Colorado	1871	1872	5
Connecticut State Medical Society	1792	1844	20
Medical Society of Delaware	1789	......	...
Medical Society of the District of Columbia	1833	1874	2
Clinico-Pathological Society of Washington	1865	......	...
Florida Medical Association	1874	1875	1
Georgia Medical Association	1849	1850	20
Georgia Medical Society of Savannah	1804	......	...
Illinois State Medical Society	1851	1851	23
Drake Academy of Medicine	1872	1874	1
Indiana State Medical Society	1849	1849	27
Iowa State Medical Society	1850	1850	10
Medical Society of the State of Kansas	1858	1867	2
McDowell Medical Society	1874	1875	1
Kentucky State Medical Society	1851	1851	19
Société Médicale de la Nouvelle Orleans	1812	1831	3
Medical Society of the State of Maine	1834	1834	1
Maine Medical Association	1853	1853	6
Medical and Chirurgical Faculty of Maryland	1789	1853	4
Boston Society for Medical Improvement	1828	1853	5
Boston Society for Medical Observation	1846	......	...
Boylston Medical Society	1811	70 prize essays published in journals.	
Gynæcological Society of Boston	1869	1869	5
Massachusetts Medical Society	1781	1790	41
Michigan State Medical Society	1819	1850	15
Minnesota State Medical Society	1855	1870	6
Medical Association of the State of Mississippi	1856	1870	1
Medical Society of the State of Missouri	1850	1850	12
Nebraska State Medical Society	1868	1869	6
New Hampshire Medical Society	1791	1854	21
New Jersey State Medical Society	1766	1859	17
Medical Association of Southern Central New York	1847	1848	11

	Organized.	First publication.	No. of vols. of publications.
Medical Society of the County of Albany	1806	1864	2
Medical Society of the County of Kings	1822	1858	2
Medical Society of the County of New York	1806	......	...
Medical Society of the State of New York	1807	1808	34
Medico-Legal Society of New York	1867	1874	1
New York Academy of Medicine	1847	1851	8
New York Medical Journal Association	1864	......	...
Pathological Society of New York	1844	......	...
Physico-Medical Society of New York	1815	1817	1
Medical Society of the State of North Carolina	1850	1850	22
Academy of Medicine of Cincinnati	1857	......	...
General Medical Society of Ohio	1827	1829	2
Medical Convention of Ohio	1835	1835	13
Ohio State Medical Society	1846	1850	26
Belmont Medical Society	1847	1818	8
Medical Society of the State of Oregon	1874	......	...
College of Physicians of Philadelphia	1787	1793	11
Medical Society of the State of Pennsylvania	1848	1851	16
Pathological Society of Philadelphia	1857	1869	4
Philadelphia County Medical Society	1849	......	...
Philadelphia Obstetrical Society	1868	1873	3
Rhode Island Medical Society	1812	1859	1
Medical Society of South Carolina	1789	......	...
South Carolina Medical Association	1848	1849	16
Tennessee State Medical Society	1830	......	...
Medical Association State of Texas	1869	1869	4
Medical Society of the State of Vermont	1814	1864	4
Medical Society of Virginia	1821	1871	5
Medical Society of Washington Territory	1873	1873	3
Medical Society of the State of West Virginia	1867	1868	8
Wisconsin State Medical Society	1842	1856	9

The formation of the American Medical Association was due to a wide spread and loudly expressed dissatisfaction on the part of the leading physicians of the country, with the low standard of medical education, and to a general conviction that the remedy for this lay neither with the schools nor the State medical societies. It was hoped that by forming an association which should represent all parties interested, a sufficient pressure of opinion might be brought to bear upon physicians and upon the schools, to secure the return to the requirements for graduation of the earlier medical colleges. After one or two futile attempts, the New York State Medical Society set on foot a movement which resulted in a meeting of a convention in the city of New York, in the year 1847, in which were present representatives of medical societies and colleges from sixteen States. A similar convention met the following year in Philadelphia, at which the title, by which it is now known, was assumed. The series of its annual volumes of transactions contains some reports and papers of much value and interest, mingled with much that is unworthy of publication under the auspices of our National Medical Society, or indeed of any other. Many of the reports of the chairmen of the several committees are of permanent historical value. Its most valuable contribution to our literature, has been the publication of a code of ethics, which is, theoretically at least, accepted as authoritative throughout the United States, and which, although some of its provisions have been objected to, is, as a whole, the most satisfactory exposition in existence of the proper relations of physicians to each other, and to the public.

Of late years, the original purpose of this association has been to some extent departed from.

It was not primarily intended to promote literature or scientific research, or to afford a means of publication for writers. Our national and State medical societies have been mainly useful as social gatherings, promoting acquaintance, and the feeling of professional brotherhood and *ésprit de corps* among their numbers, and as giving the means for agreement, and the expression of opinion, upon questions relating to education, ethics, etc.; by that large body of physicians engaged in general practice, who do not write or lecture, but simply vote. As sources of addition to the science and literature of medicine, they do not play a conspicuous part, nor is it easy to see how it can be otherwise; the real discovery, the carefully prepared paper, the description of a new symptom, pathological appearance or remedy are not usually communicated to such societies. No effectual supervision as to quality of papers which may be read or printed can, or at least will be exercised by committees, and a communication which a first class medical journal has "declined with thanks," may be taken to the State, and even to the National Society with a reasonable certainty that it can be made to appear in the transactions. The discussions on papers in such associations seldom have any scientific value, from want of special preparation on the part of the speakers, although they are sometimes amusing, and, to use an expressive word, "spicy," from the use of personalities. Whether this state of things can be improved is doubtful, though attempts to do so are of course commendable.[1]

The journals have to a great extent superseded the necessity of using societies as a means of publication, and the best work of such associations seems to consist in bringing the leaders into personal relation with the mass of the profession, and in serving as courts of arbitration and appeal, where local difficulties can be adjusted, and whose decisions will command the assent of the majority of their members.

The Transactions of the New York State Medical Society were, for a number of years, published by the State, which proved, upon the whole, to be not a desirable mode of issue, and the last volume, published by the society itself, is a great improvement upon its predecessors. What such societies might do is shown by the paper of Dr. Thomas C. Brinsmade, giving an accurate record of his practice for twenty-one years. This makes 300 pages of the volume of the Transactions of the New York State Medical Society for 1858, and contains carefully analyzed statistics of 37,872 cases. This had been preceded in 1851 by an elaborate account of the medical topography of the city of Troy, his place of residence. Taken together, these papers are very valuable, and set an example of a mode of adding to the store of medical knowledge, which is within the power of every practitioner.

An interesting experiment is now in course of trial in Alabama, where the State Medical Society has been made the State Board of Health, and the official adviser of the Legislature in all matters pertaining to public hygiene.

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[1] The best suggestion to this end for the American Medical Association which I have heard is that each section should elect its own officers and members, and should be managed by a special committee who shall designate the subject for discussion, and the leaders in debate. If the members of the committee each year are selected from a single city, it would have an additional advantage. For instance, let the managing committee of the surgical section be, this year, all residents in New York city, while Boston takes obstetrics, Philadelphia practice, etc. The next year New York can take practice, Chicago surgery, etc. In other words, transfer all the responsibility for scientific work to the sections, and let these sections be organized and managed systematically to that end alone.

The American Public Health Association, organized in 1872, may now be considered as fairly established. The operations of this society have special interest to the medical profession, since it may become an important means of educating the public, and enabling it to distinguish between the scientific physician and the ignorant pretender.

We have another class of medical societies which require an abundance of clinical and pathological material; members actually engaged in original investigations, and frequent meetings, as conditions for usefulness and success. As a rule, these can only exist in large cities, where they exert a powerful influence and stimulus to exertion on their individual members. It must be admitted that our societies of this kind seldom bring out the best work of their members, and that such discussions as occur in similar societies in London and Paris, continued week after week, and even month after month, for which elaborate preparation is made by the speakers, and in which the results of clinical observation and extensive literary research are rendered attractive and striking, by splendor of diction and perfection of style, are very rare.

The most important of these societies are the College of Physicians of Philadelphia, the New York Academy of Medicine, the pathological societies of Philadelphia and New York, the Boston Society for Medical Improvement, and certain societies devoted mainly to specialties. Among these should be mentioned the Medico-Legal Society of New York, organized in 1867. In 1874 it published a volume of papers relating to medical jurisprudence, which will be followed by others. It is also forming a valuable library in its own department, and has been the means of bringing the members of the medical and legal professions of New York to better acquaintance with each other. It is but justice to say that much of its good work and prosperity is due to the energy of its late president, a prominent lawyer, Mr. Clark Bell.

The majority of our physicians are, and must be, content to leave to a few special workers the labour and pleasure of sifting and selecting from the original sources of medical literature, having neither the wish nor the power to examine for themselves the works of the great leaders and teachers of times past, or the mass of books and pamphlets which are daily streaming from the press; but there is nevertheless among them a fair amount of appreciation of the value and necessity of such work, and of the usefulness and desirability of collections of the records of their science. During the last ten years, the writer has had occasion to examine many private libraries of physicians in all parts of the country, in country villages as well as the large cities, and it has been a matter of surprise and pleasure to find so much interest taken in subjects relating to the history and bibliography of medicine by men remote from large libraries, and without the stimulus of companionship in, and sympathy with such tastes. And it will usually be found that the physician who has on his shelves half a dozen old folios and quartos, including perhaps copies of Sydenham, Morgagni, and Van Swieten, is a man of more culture and broader views than the one who has only the modern manuals, or rather those which were modern when he attended lectures.

Until recently few of our writers have made much use of bibliographical research. We now have public medical libraries in this country, which afford to the student and scholar good facilities for research, and which bid fair, at no distant day, to rival in magnitude and practical working value, if not in manuscripts and incunabulæ, the best in the old world.

Philadelphia has several libraries of much interest and value to the medical bibliographer and scholar. The oldest medical library in this country is that of the Pennsylvania Hospital, founded in 1762, and now containing about 13,000 volumes, many of which were selected for the hospital by Doctors Lettsom, in London, and Louis, in Paris. Its classed catalogue, issued in 1857, is a valuable work of reference.

The library of the College of Physicians, of Philadelphia, which dates from 1788, now contains about 19,000 volumes well selected, receives about eighty current journals, and, next to the library at Washington, is the most valuable collection of the kind in this country. Much of its prosperity and excellence is due to Doctor Samuel Lewis, whose donations, amounting to several thousand volumes of choice books, are kept in a room by themselves, and known as the "Lewis Library." The great want of this library is a good printed catalogue, which would double its value and usefulness. The medical part of the Loganian Section in the Philadelphia Library contains about 1800 volumes, mostly old and rare. These three libraries supplement each other to a great extent, there being probably not less than 26,000 volumes between them, which are not duplicates. The fourth library is at the University of Pennsylvania, in West Philadelphia, and contains about 3000 volumes, the gift Dr. Alfred Stillé. It may be noted here that almost all attempts to establish medical libraries in connection with medical schools have been failures. Commenced with enthusiasm, they soon become antiquated, are rarely consulted, except by one or two species of beetles, are never properly catalogued or cared for, and dust and mould reign in them supreme. Students and teachers want the newest books and journals only. Libraries are used by the scholar and author, and for such are the true universities.

In New York, the library of the New York Hospital is the largest of its class, containing about 10,000 volumes. An excellent foundation for a library has been acquired by the Academy of Medicine, by the gift from Dr. Purple of a complete file of regular American medical journals and of a large number of rare pamphlets. The collections of journals of the Medical Journal Association of New York, and the German Dispensary are valuable sources of information to the student.

The Boston Public Library has at present the best collection of medical books in that city, numbering about 11,000 volumes, for the most part standard works and periodicals. Its usefulness is much diminished from the want of a good printed catalogue of this section. The library of Harvard College contains between 5000 and 6000 volumes on medicine; and the Treadwell Library, at the Massachusetts General Hospital, has about 5000 volumes. The medical library of most promise in Boston is that of the Medical Library Association, which, though only a year old, has about 3000 volumes, and will probably rapidly increase.

In Cincinnati the City Hospital has a fair collection. The Mussey Medical and Scientific Library, at present, is a special deposit in the Cincinnati public library, and contains about 4000 volumes and 2000 pamphlets.

The National Medical Library at Washington, under the direction of the Surgeon-General of the Army, contains 40,000 volumes, and about the same number of pamphlets. It has been formed within the last twelve years, and the use that is made of it by physicians from all parts of the country, and the general and strong interest that is felt in its progress affords satisfactory evidence, if such were needed, that it meets a want of the profession. Its subject catalogue is nearly ready for the press.

Besides these public libraries, there are several valuable private collections of medical works in this country, some of which have been already given to public use, such as those of Drs. Purple, Stillé, and Mussey, already referred to. Two others are worthy of special mention, the first being that of Dr. G. J. Fisher, of Sing Sing, which is rich in the classics of medicine; and the second, that of Dr. J. M. Toner, of Washington, which is especially devoted to American medical literature, and contains many rare pamphlets, besides a nearly complete file of American medical journals. In connection with this last, there is nearly ready for the press a complete index. Besides these, there are a number of valuable private medical libraries in this country, ranging from 1000 to 8000 volumes, and the number of foreign works imported, and the taste for original editions is steadily increasing. It is now possible to verify in this country the majority of the references made by European medical authors, and it is no longer necessary to make costly importations, or to visit Europe to obtain literary data.

With the libraries should be classed the *medical museums*, of which several of much interest and importance have been formed in the United States, for the most part in connection with medical societies and hospitals. The catalogues of these collections, when properly prepared, are very useful books of reference, and some excellent work of this kind has been accomplished, such as the Catalogues of the Warren Anatomical Museum of Harvard, and of the Museum of the Boston Society for Medical Improvement, each by Dr. J. B. S. Jackson; of the Pathological Museum of the Pennsylvania Hospital, by Dr. Wm. Pepper; of the Pathological Cabinet of the New York Hospital, by Dr. Ray; and of the Army Medical Museum at Washington, by Drs. Woodhull, Curtis, and Woodward.

The College of Physicians of Philadelphia has a valuable collection, including the Mütter Museum, and a series of unique preparations by Hyrtl.

The practical value of large special museums in connection with good libraries devoted to the same specialities is great, but they are useful rather to the educated physician than to the student; and the numerous small collections which are scattered over the country, in hospitals and private cabinets, are simply so much wasted and unused material, in a scientific point of view, and, though gratifying to the owner as trophies or mementoes, are of little more real use than the strings of teeth which the barbers of old hung out as signs of their skill.

The value of a single specimen of any lesion is usually very small; it is only when they can be brought together by scores and compared that useful and reliable results can be hoped for. As we get older and wiser, we shall probably have fewer journals, medical schools, museums, and libraries than we now possess, for all these means of culture, to have the best effect, require concentration.

Although the permanent importance of oral teaching has, to some extent, been diminished by the diffusion of periodical literature, since the latest discovery or theory can now be promptly made known to those remote from the great centres of learning, the increased use made of clinical instruction, and the necessity for practical demonstration of instrumental methods of diagnosis, have in a great degree compensated for this.

The medical history of a country cannot be considered complete without some account of its *medical schools*, but we have space for little more than a list of those which have flourished in the United States.

The following table gives a list of the regular chartered medical schools of this country, which have had the power of conferring the degree of doctor of medicine, with the date of first graduating class, date of cessation, and number of graduates to the spring of 1876, so far as it has been possible to obtain the data:—

It is possible that a few minor schools of short duration have been overlooked, but such must have been of small importance. No note is made in the list of the various changes of name which some of the schools have assumed. The number of graduates has been obtained by collation of all the catalogues that could be obtained, and by correspondence. From these data an estimate has been made for the missing years, and the limit of error in the total does not probably exceed one-half of one per cent. It should be observed that little reliance can be placed upon many of the catalogues as to the number of students in attendance, and there are some discrepancies even as to graduates.

Name.	Year of first graduation.	Date of cessation.	Total No. of graduates.
Alabama.			
Medical College of Alabama [Mobile]	1860	......	203
California.			
Medical College of the Pacific, Med. Dept. of University (City) College [San Francisco]	1859	......	90
University of California, Med. Dept. of (Toland Hall) [San Francisco]	1865	......	86
Connecticut.			
Yale College, Med. Dept. of [New Haven]	1814	......	899
District of Columbia.			
National Medical College, Med. Dept. of Columbian University [Washington]	1826	......	427
Georgetown University, Med. Dept. of [Washington]	1852	......	387
Howard University, Med. Dept. of [Washington]	1871	......	37
Georgia.			
Medical College of Georgia [Augusta]	1833	......	1278
Savannah Medical College [Savannah]	1854	......	140
Atlanta Medical College [Atlanta]	1855	......	560
Oglethorpe Medical College [Savannah]	1856	1861	86
Illinois.			
Rush Medical College, Med. Dept. of University of Chicago [Chicago]	1844	......	1786
Illinois College, Med. Dept. of [Jacksonville]	1848	1848	39
Rock Island Medical School [Rock Island]	1849	1849	19
Chicago Medical College, Med. Dept. of Northwestern University [Chicago]	1860	......	481
Indiana.			
Indiana Medical College, Med. Depart. of Laporte University [Laporte]	1842	1851	136
Medical College of Evansville [Evansville]	1850	......	74
Indiana Central Medical College [Indianapolis]	1850	1852	39
Indiana Medical College [Indianapolis]	1870	......	251
Indiana College of Physicians and Surgeons [Indianapolis]	1875	......	......

Name.	Year of first graduation.	Date of cessation.	Total No. of graduates.
Iowa.			
College of Physicians and Surgeons [Keokuk] . .	1850	......	777
Iowa State University, Med. Dept. of [Iowa City] .	1871	......	111
Kentucky.			
Transylvania University, Med. Dept. of [Lexington] .	1818	1859	1860
University of Louisville, Med. Dept. of [Louisville] .	1838	......	2395
Kentucky School of Medicine [Louisville] . . .	1851	......	520
Louisville Medical College [Louisville]	1870	......	402
Hospital College of Medicine, Med. Dept. of Central University [Louisville]	1875	......	91
Louisiana.			
University of Louisiana, Med. Dept. of [New Orleans]	1835	......	1703
New Orleans School of Medicine " "	1857	1870	397
Charity Hospital Medical College of N. O. " "	1876	......	10
Maine.			
Bowdoin College and Med. School of Maine [Brunswick]	1821	......	1137
Maryland.			
University of Maryland, Med. Dept. of [Baltimore] .	1811	......	3104
Washington University, School of Medicine [Baltimore]	1828	......	680
College of Physicians and Surgeons "	1873	......	118
Massachusetts.			
Harvard University, Med. Dept. of [Boston] . .	1785	......	2206
Berkshire Medical College, [Pittsfield] . . .	1823	1867	1136
Michigan.			
University of Michigan, Med. Dept. of [Ann Arbor] .	1851	......	1405
Detroit Medical College [Detroit]	1869	......	204
Missouri.			
Missouri Medical College [St. Louis]	1841	......	921
St. Louis Medical College " "	1843	......	1293
Humboldt Medical College " "	1867	1869	16
Kansas City College of Physicians and Surgeons .	1870	......	46
St. Louis College of Physicians and Surgeons [St. Louis]	1870	1870	8
New Hampshire.			
Dartmouth College, Medical School of [Hanover] .	1798	......	1283
New York.			
College of Physicians and Surgeons of the City of New York, Med. Dept. of Columbia College [N. Y. City] .	1769	......	3179
College of Physicians and Surgeons of the Western District of New York [Fairfield]	1816	1840	585
Geneva College (Rutgers Med. Faculty) [N. Y. City]	1827	1830	104
Geneva Medical College [Geneva]	1835	1872	849
Albany Medical College [Albany]	1839	......	1287
University of the City of New York, Medical Dept. of [N. Y. City]	1842	......	3393
University of Buffalo, Med. Dept. of [Buffalo] . .	1847	......	848
New York Medical College and Charity Hospital [N. Y. City]	1851	1864	310
Long Island College Hospital [Brooklyn] . . .	1860	......	531
Bellevue Hospital Medical College [N. Y. City] . .	1862	......	1908
College of Medicine of Syracuse University [Syracuse]	1873	......	26
Ohio.			
Medical College of Ohio [Cincinnati]	1821	......	2170
Cincinnati College, Med. Dept. of [Cincinnati] . .	1836	1839	95
Starling Medical College [Columbus]	1833	......	887

Name.	Year of first graduation.	Date of cessation.	Total No. of graduates.
Cleveland Medical College, Med. Dept. of Western Reserve College at Hudson [Cleveland]	1844	......	1162
Cincinnati College of Med. and Surgery [Cincinnati]	1852	......	760
Miami Medical College [Cincinnati]	1853	......	578
University of Wooster, Med. Dept. of [Cleveland]	1865	......	328
Oregon.			
Willamette University, Med. Dept. of [Salem]	1867	......	63
Pennsylvania.			
University of Pennsylvania, Med. Dept. of [Philadelphia]	1768	......	8845
College of Philadelphia [Philadelphia]	1790	1791	10
Jefferson Medical College "	1826	......	6668
Pennsylvania College at Gettysburg, Med. Dept. of [Philadelphia]	1840	1861	769
Franklin Med. College of Philadelphia [Philadelphia]	1847	1849	25
Philadelphia College of Medicine "	1847	1859	502
Rhode Island.			
Brown University, Medical School of [Providence]	1814	1826	68
South Carolina.			
Medical School of the State of South Carolina [Charleston]	1825	......	2439
University of South Carolina, Med. Dept. of [Columbia]	1868	......	26
Tennessee.			
Memphis Medical College [Memphis]	1847	1873	231
University of Nashville, Med. Dept. of [Nashville]	1852	......	1741
Shelby Medical College [Nashville]	1859	1861	30
Vanderbilt University, Med. Dept of [Nashville]	1875	......	75
Texas.			
Galveston Medical College [Galveston]	1866	......	123
Texas Medical College and Hospital [Galveston]	1874	......	38
Vermont.			
Castleton Medical College [Castleton]	1820	1861	1449
University of Vermont and State Agricultural College, Med. Dept. of [Burlington]	1823	......	573
Vermont Medical College [Woodstock]	1830	1860	575
Virginia.			
University of Virginia, Med. Dept. of [Charlottesville]	1828	......	533
Medical College of Virginia [Richmond]	1839	......	947
Winchester Medical College [Winchester]	1846	1862	75
Total			73,588

If we take the number of graduates by decades of years during the present century, the result is as follows :—

Years.	No. of graduates.	Years.	No. of graduates.
1769–1799	221	1840–1849	11,828
1800–1809	343	1850–1859	17,213
1810–1819	1,375	1860–1869	16,717
1820–1829	4,338	1870–1876	14,704
1830–1839	6,849		

The first medical school in this country was established by Drs. John Morgan and William Shippen at Philadelphia in 1765, and is now known as the Medical Department of the University of Pennsylvania. From its halls have graduated the majority of the distinguished medical writers, teachers, and practitioners of the United States, and the names of its professors have become household words.

Organized upon the plan of the Edinburgh Medical School, of which its founders were graduates, it has been the model and pattern by which all our medical colleges have been shaped. Its largest graduating class was in 1849, numbering 191. In the following year Professor Chapman resigned, and for the next ten years the Jefferson School graduated the greater number, reaching its maximum of 269 in 1854. The Jefferson Medical College was founded in 1824, under the charter of Jefferson College in Canonsburg, Pennsylvania. The first course of lectures was delivered in 1825-26, the Faculty being Drs. Eberle, McClellan, Rhees, Green, and Beattie. Numerous changes were made in professors, and its classes varied much in size until 1841, when all the chairs were vacated and refilled by Drs. Dunglison, J. K. Mitchell, Pancoast, R. M. Huston, Mütter, Meigs, and Bache. This Faculty continued until 1856, when Professor S. D. Gross succeeded Dr. Mütter. In 1857 Dr. T. B. Mitchell took the place of Dr. Huston, and in 1858 Dr. Dickson that of Dr. J. K. Mitchell.

The second medical school founded in this country was at New York, under the charter of King's College, in 1767. This school has had many vicissitudes, but is now in a flourishing condition, and known as the College of Physicians and Surgeons of the City of New York, being the Medical Department of Columbia College. Its largest graduating class was 110 in 1875.

The Medical Department of Harvard University was founded by Dr. John Warren in 1782. Its maximum class of graduates was 99 in 1866. Recently it has led the way in elevating the standard of medical education, by extending its curriculum to three years, establishing a graded course, and by having decided to institute a real examination into the preliminary education of its students. This has of course diminished its classes somewhat, but no one can doubt that the decision to aim at quality instead of quantity is a wise one, and will in the fulness of time receive its due reward.

The first medical school in the West was established in Lexington, Ky. So early as 1799 a Medical Department was added to Transylvania University, Dr. Samuel Brown being appointed the first professor. Various appointments in the Medical Faculty were made, and a few partial courses of lectures were delivered, but the first full course was not given until 1817, and the degree of M.D. was first conferred in 1818. The founders of the school were Drs. Dudley and Caldwell. Its period of greatest prosperity was from 1830 to 1837, at which last date a disruption took place, and a part of the Faculty removed to Louisville.

The Medical Department of the University of Louisville began as the Medical Institute, chartered in 1833. Nothing was accomplished, however, until the quarrel in the Transylvania School above referred to took place, when Dr. Caldwell enlisted in the cause of the Louisville School, and in 1837 succeeded in obtaining for it a grant of a square of ground, and money for buildings and apparatus. Lectures began the same year, the Faculty consisting of Drs. Caldwell, Cooke, and Yandell, from the Lexington School, and of Drs. Cobb, Henry Miller, and J. B. Flint. In 1839 Dr. Drake joined the School, and in the following year Dr. S. D. Gross took the place of Dr. Flint. In 1846 the School was transferred to the University, and in 1874 it had 123 graduates, its largest class.

In connection with these schools a special reference is due to Dr. Charles Caldwell, their principal promoter. He was of Irish descent, born in North Carolina in 1772; died 1853. After obtaining the best education which his native State could afford, he went to Philadelphia in 1792, and continued the study of medicine under Dr. Rush, passing his examination in 1794, and taking his diploma in 1796. During the next twenty years his pen was constantly busy with lectures, addresses, and controversial articles, many of which related to yellow fever. In 1819 he accepted an invitation to the Transylvania School, and from this time he gave his best energies to this institution, and subsequently to the Louisville School. He was one of the most voluminous writers which this country has produced, but he contributed little or nothing of permanent or scientific value to the literature of his profession, and the only work of his which is worth perusal to-day is his autobiography. His critical reviews, being dictated almost exclusively by personal prejudices, are in almost all cases samples of special pleading rather than true criticism, and characterized by their "smartness" rather than their justice.

In the South the Medical College of South Carolina, chartered in 1823, leads the way. The Medical College of Louisiana was incorporated in 1835, and in 1845 became the Medical Department of the University of Louisiana. This school is remarkable as having received State aid to the amount of $121,000.

In connection with the medical schools, notice should be taken of the Medical Institute of Philadelphia, otherwise known as the Summer School, which, in addition to furnishing instruction to students and supplementing the winter course, was of very great value as a training school for Professors. It was founded in 1817 by Dr. Chapman, and with it were connected, from time to time, Drs. Chapman, Horner, Dewees, Samuel Jackson, J. K. Mitchell, John Bell, Hodge, Neill, Gibson, Gerhard, Norris, and Pepper.

The total number of graduates from our medical schools during the five years ending July 1, 1875, was about 10,250, that is, a little over 2000 per year; the number in 1875 being about 400 more than in 1871.

Dr. J. M. Toner estimated the average age of beginning practice to be 24½ years, of death 58 years, making an average of about 34 years practice to each.[1]

Dr. S. E. Chaillé estimates that there are about 47,000 regular physicians in the United States, being about one to every 700 of the population.[2]

Space is wanting for further details with regard to our medical schools. That there are too many of them is a general complaint, the answer to which is the same as that given above with regard to the like objection with regard to medical journals, and which answer is of about the same value in each case.

In attempting to estimate the quantity and value of the additions made by the medical profession of this country to the world's stock of knowledge of the laws of healthy and diseased action, and the means of modifying these actions, it is very difficult to make generalizations which shall be at once clear, comprehensive, and correct. This difficulty becomes an impossibility, if we are to speak of the education, mental characteristics, and professional qualifications of the whole body of physicians of this, or any other country, since only the most vague and indefinite statements will hold good. We have had, and still have, a very few men who love science for its own sake, whose chief pleasure is in original investigations, and to whom the practice of their profession is mainly, or only, of interest as furnishing material for observation and comparison. Such men are to be found for the most part only in large cities where libraries, hospitals, and laboratories are available for their needs, although some of them have preferred the smaller towns and villages as fields of labour. The work of our physicians of this class has been for the most part fragmentary, and is found in scattered papers and essays which have been pointed out in preceding essays; but buds and flowers, rather than ripened fruit, are what we have to offer. Of the highest grade of this class we have thus far produced no specimens; the John Hunter, or Virchow, of the United States, has not yet given any sign of existence.

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[1] Statistical Sketch, etc. Indiana Journ. of Med., 1873, vol. iv. p. 1.

[2] The Medical Colleges, etc. New Orleans Med. and Surg. Journ., 1874, vol. i. N. S. p. 818.

We have in our cities, great and small, a much larger class of physicians whose principal object is to obtain money, or rather the social position, pleasures, and power, which money only can bestow. They are clear-headed, shrewd, practical men, well educated, because "it pays," and for the same reason they take good care to be supplied with the best instruments, and the latest literature. Many of them take up specialties because the work is easier, and the hours of labour are more under their control than in general practice. They strive to become connected with hospitals and medical schools, not for the love of mental exertion, or of science for its own sake, but as a respectable means of advertising, and of obtaining consultations. They write and lecture to keep their names before the public, and they must do both well, or fall behind in the race. They have the greater part of the valuable practice, and their writings, which constitute the greater part of our medical literature, are respectable in quality, and eminently useful.

They are the patrons of medical literature, the active working members of municipal medical societies, the men who are usually accepted as the representatives of the profession, not only here, but in all civilized countries; they may be famous physicians and great surgeons in the usual sense of the words, and as such, and only as such, should they receive the honour which is justly their due. They work for the present, and they have their reward in their own generation.

There is another large class, whose defects in general culture and in knowledge of the latest improvements in medicine, have been much dwelt upon by those disposed to take gloomy views of the condition of medical education in this country. The preliminary education of these physicians was defective, in some cases from lack of desire for it, but in the great majority from lack of opportunity, and their work in the medical school was confined to so much memorizing of text-books as was necessary to secure a diploma. In the course of practice they gradually obtain from personal experience, sometimes of a disagreeable kind, a knowledge of therapeutics, which enables them to treat the majority of their cases as successfully, perhaps, as their brethren more learned in theory. Occasionally they contribute a paper to a journal, or a report to a medical society; but they would rather talk than write, and find it very difficult to explain how or why they have succeeded, being like many excellent cooks in this respect. They are honest, conscientious, hard-working men, who are inclined to place great weight on their experience, and to be rather contemptuous of what they call "book learning and theories." To them our medical literature is indebted for a few interesting observations, and valuable suggestions in therapeutics, but for the most part, their experience, being unrecorded, has but a local usefulness.

These three classes have been referred to simply for the purpose of calling attention to the fact that, in speaking of "the physicians of the United States," it is necessary to be careful. There are many other classes, and they shade into each other and into empiricism in many ways. In discussions upon this subject, it seems to be often assumed that all physicians should possess the same qualifications, and be educated to the same standard, which, in one respect, is like saying that they should all be six feet high, and in another, is like the army regulations, which prescribe the same ration and allowance of clothing for Maine and Florida, Alaska and Oregon. A young and energetic man who has spent six years in obtaining a University education, and four more in the study of medicine as it ought to be studied, that is to say, in preparing himself to study and investigate for the rest of his life, will not settle in certain districts. He has invested ten years' labour, and from five to ten thousand dollars, and a locality which will give him a maximum income of, perhaps, fifteen hundred dollars per annum will not be satisfactory, in part because the capital should bring a better interest, in part because he will have acquired tastes which will make his life unpleasant in such places. Yet these places must have physicians of some sort, and it is not clear as to how they are to be supplied, if some of the universal and extensive reforms in medical education which have been proposed were to be enforced.

Certainly the standard for admission and for graduation at almost all our medical schools is too low, and one-half, at least, of these schools have no sufficient reason for existence; but it is not probable that it would improve matters much to establish a uniform, which must, of course, be a minimum, standard.

Of the material aids and instruments required for the advancement of medical science, such as hospitals, libraries, and museums, we have obtained as much as could be expected. With the proper use of those we now possess will come the demand for, and the supply of, still better facilities for the work of the scholar and observer.

The defects in American medicine are much the same as those observed in other branches of science in this country, and to a great extent are due to the same causes.

Culture, to flourish, requires appreciation and sympathy, to such an extent, at least, that its utterances shall not seem to its audience as if in an unknown tongue.

We have no reason to boast, or to be ashamed of what we have thus far accomplished; it has been but a little while since we have been furnished with the means of investigation needed to give our observations that accuracy and precision which alone can entitle medicine to a place among the sciences properly so called; and we may begin the new century in the hope and belief that to us applies the bright side of the maxim of Cousin, "It is better to have a future than a past."